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ABSTRACT

By means of close examination of the records created and accumulated by individual architects and architectural firms in France, this Records and Archives Management Programme (RAMP) study is intended to call attention to the basic documentary values of these architectural records and to provide practical guidance to help ensure their preservation until they can be transferred to archival custody. The purpose and scope of the manual are discussed, general archival definitions are provided, and the study is presented in five parts which correspond to the various stages in the life of documents as considered from the standpoint of archives: (1) the project designer/supervisor (prime contractor) and the stages in the preparation of files; (2) the composition of a file, based on an examination of a file on the construction of the Departmental Records Office, Seine-Saint-Denis; (3) appraisal and preservation; (4) classification and finding aids; and (5) physical preservation. A 55-item bibliography of RAMP publications and related documents is provided. In addition, appendices include samples of documentation from several French archives and from the Staatsarchiv Wertheim, a listing (in French) of national and international standards, and a 47-item annotated bibliography, also in French. (KM)

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The Processing of architect's records

a case study: France

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THE PROCESSING OF ARCHITECTS' RECORDS

a case-study: France

prepared by

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PREFACE

In order to assist in meeting the needs of Member States, particularly developing countries, in the specialized areas of Archives Administration and Records Management, the Division of the General Information Programme has developed a long-term Records and Archives Management Programme - RAMP.

The basic elements of RAMP reflect and contribute to the overall themes of the General Information Programme. RAMP thus includes projects, studies and other activities intended to:

develop standards, rules, methods and other normative tools for the processing and transfer of specialized information and the creation of compatible information systems;

enable developing countries to set up their own data bases and to have access to those now in existence throughout the world, so as to increase the exchange and flow of information through the application of modern technologies;

promote the development of specialized regional information networks;

contribute to the harmonious development of compatible international information services and systems;

set up national information systems and improve the various components of these systems;

formulate development policies and plans in this field;

train information specialists and users and develop the national and regional potential for education and training in the information sciences, library science and archives administration.

The present study, by means of close examination of the records created and accumulated by individual architects and architectural firms in one country, is intended to call attention to the basic documentary value of this material, and to provide practical guidance to help ensure its preservation until it can be transferred to archival custody. While details regarding architectural records will vary from country to country, and perhaps between public and private institutions in the same country, everywhere in the world these records which relate to the built environment are basic to an understanding of the life and culture of peoples. It is hoped that the present case-study will stimulate similar case-studies and an eventual universal approach to this valuable component of our heritage.

Comments and suggestions regarding this Study are welcomed and should be addressed to the Division of the General Information Programme, Unesco, 7 place de Fontenoy, 75700 Paris. Other studies prepared under the RAMP programme may also be obtained at the same address.

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1. PURPOSE AND SCOPE OF THE MANUAL. GENERAL DEFINITIONS

1.1 Purpose and scope of the manual

1.1.1 Interest in architectural archives

Architectural archives exist in virtually every country and to locate and preserve them is a matter of concern to various institutions: these include not only archives but also museums and specialized institutions and sometimes libraries (American museum and university libraries more especially, the Royal Institute of British Architects, London, the Institut français d'Architecture, Paris, the Architecturmuseum in Amsterdam and the Archives de l'Architecture moderne in Brussels). This is a concern that has many practical and cultural consequences, although it is one that is not yet shared by every country. Because of this, many architectural records simply disappear. Admittedly, because of cost-effectiveness considerations, such countries do not feel able to include cultural expenditure in their budgets; none the less they have a moral responsibility to ensure the survival of records concerning the building works carried out. As often as not, a mass of documents which, in the absence of any appropriate archiving arrangements, have become unwieldy and space-consuming are simply destroyed in order to get them out of the way and a valuable historical and cultural heritage is thereby lost for ever. Too few architects realize the historical value of their work, and hence, of their archives, believing that only records of 'masterpieces' are worthy of being preserved. But history should not be confined to the masterpieces of eminent artists but should include building as such in all its aspects.

But architects are not the only persons involved: at every stage of a project, files are prepared and make their way to the administrative services, to the client - whether an individual, promoter, company, government or semi-official department - and to professional associations of architects, etc.

Another factor to consider is the status of the architect's profession, varying as it does from country to country, which may determine the disposal of archives, and possibly involve their transfer to a public records office. Although architects may have a strictly private status, these public records offices often endeavour to accommodate private fonds but they could hardly assume responsibility for the whole private sector even when the archives concerned are part of the nation's cultural heritage.

One very welcome development is that the pioneering work of art historians is being taken up to an increasing extent by the architects themselves so that specialized publications and theses are becoming more numerous and making the history of architecture a discipline in its own right.

However, these are isolated efforts that cannot take the place of determined and sustained action which proceeds by way of recognition by the architect's profession as a whole of the value of its archives and of the need to ensure their preservation. Heedlessness is in fact the first danger to which such documents are exposed. There are two stages to be observed in giving documents the attention they warrant: in the short term there must be action to ensure safe custody, correct preservation and access to existing fonds while in the long term there should be, as it were, a process of community information in terms of a dialogue between producer and keeper of the records, users of the architectural works and users of the archives.

1.1.2 Definition of architectural archives and specific character of the architectural document

The existence of 'architectural archives' is sometimes disputed and indeed, considering the question worldwide, it is fair to say that, over and above institutional differences, the problem is one of specific sources rather than of institutions. These sources may be very extensive in scope and architectural archives do not coincide with the archives of architects. Their definition is wider, encompassing as they do all documents that are essentially representative plans relating to architecture or town planning. Accordingly they include documents concerning not only architecture but also public works, town planning and land-use planning issued by government departments (ministries responsible for activities directly or indirectly connected with architecture and town planning), local authorities, and also the archives of architects themselves and their professional associations, or, again, collections on the subject of architecture.

This wide definition ranges then, from archival fonds to single documents. It cannot be confined to plans, neither can it exclude the 'written material' which accompanies and explains those documents, namely, estimates, contracts, specifications, bills of materials and interim statements, certificates of conformity, building permits, all of which occupy an important place in the archival fonds and cannot be disregarded. Moreover, the architect's business gives rise to considerable printed matter, such as prospectuses, brochures, notices, announcements of real estate operations, etc. We must, therefore, in the light of museographical practice, underline the need for these documents to be assigned their own archival treatment, taking into consideration the whole range of fonds in their organic structure.

Nevertheless it is essential to emphasize the representative plan portion of these fonds in order to bring out their special character. These graphic documents are characterized by scale drawings and not by any written text; they cannot be read as a matter of course and to understand them demands special technical knowledge. They also raise unusual problems of physical custody by reason of their format and medium; plans attached to files are often in a deplorable state if not indeed entirely missing; 'negatives', prints and photocopies, photographs and models are seldom preserved under satisfactory conditions. Furthermore, the requirements involved in their preservation must not hamper their use.

In general, all these documents can be divided into three groups:

those which mark the various stages of progress in the preparation of a project;

those which are prepared when a project is being carried out;

and finally, those which record the state of a completed work.

This, then, is the structure that we shall be re-examining in greater detail further below.

1.1.3 Isolated documents

We have seen that archival practice does not allow documents to be dissociated from the fonds to which they belong. But beside these organically constituted fonds there are collections in which isolated documents of various

origins are placed side by side, this artificial juxtaposition being the result of a choice most often made on the basis of a theme or centre of interest. Maps, plans, architectural drawings may, then, form the subject of collections and their archival treatment will then take into consideration the isolated document without reference to any whole body of records. But here too the specific nature of the graphic document concerned will dictate special methods of custody and description.

1.1.4 Arrangement of the manual

The scope of this manual is confined to architects' archives which are one of the essential elements that go to make up the much larger total body of records that we know as 'architectural archives'. At the same time, it takes the opportunity of referring to the general rules of archival treatment and of mentioning, in passing, similar documents kept in other archival fonds.

Given the present state of available documentation, as shown by the surveys already carried out, this manual cannot be other than a preliminary study covering conventionally produced documents and attempting to arrive at simple practical archival solutions for them. The study consists of five parts which correspond to the various stages in the life of documents considered from the standpoint of archives. It appeared essential to consider the conditions in which the documents were produced and, as a first step, to identify the nature of their producers. It will indeed be seen that the architect's profession cannot be covered by a standard definition applicable in all countries and that the corpus of building laws and regulations must also be taken into account. The next step will be to try to establish the typical components of a file and to deal at some length with the definition of the major categories of technical document that go to make it up. Rather than becoming involved with vague generalities, we have preferred to describe an actual file (that concerning the construction of a records office for French departmental archives). The necessary support for this operation was provided by the architects Bernard Feypell and Edward Zoltowski and all the members of their team, for whose able and active assistance we are most indebted.

With the file now constituted we move on to problems posed by custody, i.e. first of all the question of appraisal and elimination for which flexible guidelines must be established with due regard for the technical and administrative importance of the documents and, in the longer term, their historical and cultural value. As both a short and long-term measure a system of location is clearly needed and this theme will be developed accordingly. Finally, as an overriding consideration, there are the conditions of physical custody which - covering as they do the total body of cartographic records - must bring us to the question of storage and lead on to the problems of restoration and replacement.

1.1.5 Responsibility for the storage of records

Like archival institutions, the professional practices of architects and building regulations vary from country to country. This study, based as it is on localized examples and practices, and necessarily carried out within a fairly short period, seeks to highlight the functions and processes that appear to be constant and fundamental to the act of building. It should be pointed out that this study needs to be rounded off by others of a more specialized nature, particularly with regard to legislation and regulations.

Over and above these disparities which make a certain amount of generalization necessary, there is another problem, namely, where does responsibility lie for the storage of records or, in other words, who should be the readers of this manual? In the event it was decided to distinguish two forms of storage which indeed often proceed in parallel and complement each other. The first is the holding of files as 'current records' in the architect's office while the second is the final storage of files on finished projects, which could be the responsibility of either the architect's office or an archival 'institution'. It was therefore considered that the user of this manual might either be the architect - who produces the documents and understands them fully but is less familiar with the techniques of records custody - or the professional archivist - who will have less knowledge of this specific kind of document. However, this distinction must not be allowed to cloud the main issue, namely that of continuity to ensure proper preservation of archives organized from the very start.

1.2 General archival definitions

1.2.1 Archives and the principle of provenance

Archives are the total body of documents, irrespective of date, form or medium, produced or received by a physical or juridical person, or a public or private body, by virtue of their profession, business or other activity, arranged and preserved either permanently, or for a specific period followed by permanent storage according to the requirements of the profession, business or other activity concerned. This definition draws a clear distinction between archives organized organically according to provenance and libraries formed by purchases, legal deposit, etc., or documentation constituted by files containing documents of different provenance. It implies the notion of archival fonds, i.e. bodies of documents which are built up on the basis of the activities of a physical or juridical person. The concept of fonds contrasts with that of collection, inasmuch as the latter is a set of documents of different provenance whose juxtaposition is the result of choice or chance.

In accordance with the principle of provenance, an archivist always keeps the various fonds that he receives separate without mixing or dividing them up. This means that files produced by an institution or individual, and constituting the fonds of that institution or individual, cannot be confused with those of other institutions or individuals even if their subject-matter is identical. To take an example of documents for one and the same project, the files belonging to the client, the project designer/supervisor or the administration will be kept separate even though the archives from these several sources may be kept physically together in the same place of storage. Similarly, when considering the architect's fonds, plans and files of written documents will not be separated (they may be separated physically for practical reasons of shelving but their thematic relation must always be clearly respected).

A fonds can be divided into subdivisions corresponding to the different sections of the organization which produced them.

1.2.2 Some definitions

Fonds can be arranged according to classification schemes reflecting their major divisions. A fonds comprises a number of 'pieces' - the physical units requiring custody (files, bundles, registers, etc.) composed in turn of items (an item being the smallest indivisible archival unit). Every 'piece' is

in principle given a reference number to allow ready physical location and appearing on all finding aids (inventories, lists, catalogues) which are the culmination of the appraisal and arrangement work to be discussed later in this study (1.2.4).

1.2.3 The purpose of archives

Before considering the ultimate aim of pure historical research, it must be remembered that archives are preserved primarily for the direct and immediate use of their producer. Thus, taking the example of an architectural drawing, this has firstly an active value corresponding to the period of construction and life of the building followed by a secondary or historic value which persists even when the building no longer exists.

Indeed, as already mentioned earlier, a document does not become an archive at the end of a certain time but is an archive from the moment of its creation, even though its historic importance may increase from the standpoint of conservation and its interest in terms of direct practical usefulness decline. Archives are necessary for the management of any concern and their contents are of historical interest; however, their ever-growing volume raises problems of organization and custodial skill. Well-kept archives represent savings in space and management time.

From being current records which are consulted frequently for the dispatch of business in hand, files become semi-current records once the projects are completed and need to be consulted only occasionally for reference or in case of claims. In effect, these semi-current records contain all the files that must be kept to meet the requirements of law. Finally, there are the definitive or historical records that are of such abiding interest as to justify lasting preservation as proof or in defence of rights and as sources for historical research.

Over and above these distinctions that are established for the purposes of our argument but are none the less artificial inasmuch as applying to the selfsame documents, it must be stressed once again that the organization of archives commences from the moment they are first created. An efficiently-organized filing system demands that documents should not be treated as valueless bits of paper piled up in cupboards or filing cabinets and periodically destroyed 'to make more room'.

1.2.4 What to keep? Appraisal and elimination

Appraisal and elimination reflect a dual need: firstly material and economic in view of the impossibility of storing every document produced; secondly, intellectual in that no one could possibly make effective use of a body of documents in which there was no distinction between the essential and the ancillary. In practice admittedly the requirements of research and the constraints of archives systems do not necessarily match up. The need to carry out appraisals involves what cannot be other than a subjective judgement and, as we shall see, in the matter of architects' archives few criteria have yet been defined. This is undoubtedly the sphere in which the responsibility of the archivist weighs most heavily for his decisions are final and the destruction of documents irremediable.

At all events, archival appraisal cannot be considered as a simple physical operation aimed at clearing out a room haphazardly; it must be understood as a permanent system devised on the basis of well-defined criteria.

1.2.5 Accessibility

The ultimate purpose of archives is use of the documents. This means that passive custody will not suffice. What is more, the user, whoever he may be, must be able easily to retrieve the document which he needs. This presupposes the existence of an arrangement scheme and a minimum of 'finding aids' for access to the documents, plus the appropriate physical conditions for consultation. Finally, the documents that are to be made available should be in a proper state of conservation.

All these questions form the subjects of the chapters which follow.

2. THE PROJECT DESIGNER/SUPERVISOR (PRIME CONTRACTOR) AND THE STAGES IN THE PREPARATION OF FILES

2.1 Project design and supervision

2.1.1 Definition

The project designer/supervisor is the person or body responsible for the design and/or supervision of the whole of the building work to be carried out. This definition implies a function rather than a profession and indeed modern building construction is characterized by considerable complexity in the relations between the numerous agents. Because of this the traditional roles of the main sectors concerned in building are often called into question and the dividing lines between the professions tend nowadays to be in a state of flux, mainly, of course, in countries where free enterprise plays its part. The specific role of the person or body in charge of project design and supervision, as defined above, may thus be exercised by architects, but also by other accepted technical professional bodies or members thereof, such as consultant engineers, technical design offices or public technical departments.

2.1.2 Main functions of the project designer/supervisor

These are as follows:

ensure that the operation planned is viable and in accordance with budgetary provisions;

design, represent graphically, describe and evaluate the work;

co-ordinate the supplementary technical designs;

submit applications for permits from the authorities;

investigate and propose the means for carrying out the project and prepare the necessary contracts for placing;

superintend all work performed, checking its conformity with the project, its quality and cost;

propose payments;

be present at the formalities of acceptance;

prolong such services as may be required during the guarantee period following acceptance.

2.1.3 The profession of architect

Historically and traditionally project design and supervision has (until recently) been combined with exercise of the architect's profession. The complexity of building construction today has tended to separate these two notions, all the more so since the profession of architect does not enjoy a uniform and officially protected status in every country. Project design and supervision, which is comprehensive in scope, necessarily involves many disciplines and, hence, many professions, and in the case of highly complex projects may demand collaboration between architects and engineers. None the less, the architectural function, whose most important practical aspect is the preparation of the architectural project, remains the business of the architect and indeed this is recognized and specified by law in several countries (e.g. Article 4 of Law No. 77-2 of 3 January 1977 on architecture, in the case of France).

Architects, who, as creators, leave behind them a heritage of buildings and of archives (which account for our interest in them here) must, then, be considered in detail.

2.2 The profession of architect

2.2.1 General observations

It is estimated that there are some 800,000 fully qualified architects in the world. Their recognition as a profession is fairly recent, the first professional associations having been formed between 100 and 150 years ago, while the profession has enjoyed legal protection for less than half a century in the countries where this is assured. In fact, the status of the architect depends largely on the social and political system of the country concerned, as well as on its degree of economic and cultural development.

The principal types of concern in which architects work are as follows:

private firms (professional practice);

design offices;

private or public institutions or organizations in charge of project design and supervision;

building concerns engaged in construction, installations, etc.;

government and local government departments;

teaching, scientific or documentation institutions.

According to the estimates made in the final Arkisyst report, about 75 per cent of architects are engaged in the design and setting up of projects. The sectors in which they play a key role are as follows:

town planning and site development;

design of new buildings;

preparation of models (standard plans);

renovation and conversion of existing buildings;

restoration of historical monuments;

design of temporary structures;

interior fitting out.

2.2.2 Legal status

In most OECD countries this status is established by law: the obligation to register with a professional body in order to exercise the profession of architect, conditions of practice, competence, rules to be observed. Generally speaking, this legislative framework serves to protect the profession and ensure its participation in any major project.

In the CMEA countries, with their high degree of economic, administrative and institutional centralization, the status of the architect is determined more by the position which he holds in the occupational structure than by membership of a professional body. Many positions in the planning, housing or industrial production sectors are, for instance, reserved for architects. Those who practise privately (generally part-time) must have an authorization to do so.

Finally, in the developing countries the situation is much more fluid in that the law seldom distinguishes the architect from other building professionals. It may even be that he is not recognized as having any special legal status. In the Commonwealth countries the organization of the profession follows the British model while an analogous situation obtains in French and Spanish-speaking countries.

Over and above legal differences, the general tendency is towards the concept of 'personalized responsibility' which postulates, although often rather idealistically, the notion of independence.

2.2.3 Professional practice

In countries where private practice predominates, most architects work in partnership; such firms are relatively small with generally fewer than 10 employees. They seldom specialize in one type of construction but co-ordinate the technical designs provided by outside consultants under the direction of the responsible architect.

The most important projects are placed with large diversified firms whose staff are capable of handling not only planning and design but the whole range of services required. These firms can even undertake the construction work but are often prevented by law or professional ethics from any direct participation in it (France, United Kingdom, Spain). In the United States of America these firms are organized as actual companies controlled by their boards of directors.

In the CMEA countries, architects work almost entirely within bodies coming under a ministry, a local administration, an industrial or agricultural concern. In fact, architectural and town planning work is carried out within the context of Institutes of Architecture or services forming part of administrative departments.

In most developing countries the client for whom the work is carried out is the State. Architects' offices come under ministries and cater for the greater part of work in the public sector. Private firms are generally few and far between (2-5 persons). The architects share the work with technicians and members of allied professions and trades. It should be noted that in these countries two forms of architecture exist side by side, namely, an official prestige architecture, and architecture of another type for small national projects. The latter are more numerous and prepared by technicians or draughtsmen, the architect being called in if required as a consultant.

2.2.4 Training and professional organizations

Architects are trained in universities, technical institutes or specialized schools. In many developing countries the specialized schools are recent creations and sometimes associated with an engineering college. Some governments give grants for study abroad, in return for the services of the beneficiary for a certain length of time.

Consequently, in these countries (with some exceptions) professional organizations are quite young and have few members. Generally, these organization seek to make the profession more coherent, to protect it and ensure its recognition and to represent the interests of its members vis-à-vis the authorities and other institutions. In some countries (France, Spain) membership is compulsory. The fixing of scales of fees or recommendations by the professional organization to that effect is a declining practice. These organizations may have an archive custodial role (as in the case of the Spanish college of architects to which projects are submitted and where their records are preserved). In the CMEA countries recruitment is solely by co-option and admission is the indication of professional success.

The link between the various associations is provided by the International Union of Architects (IUA) which ensures the international scope of the architect's profession through the dissemination of new techniques and artistic trends.

2.3 Government intervention and official regulations

We have seen that 75 per cent of the architect's work is concerned with design. But the apparent freedom that this percentage implies is tempered by the administrative control that makes itself felt in the execution of the work. For many reasons the public authorities have felt constrained since the Second World War to intervene more and more in the sphere of town and country planning, public works and the building sector in general. Two examples are given here of the administrative sectors that are involved.

2.3.1 The role of the authorities in France

Government intervention is exercised essentially through a Ministry created in 1944 with responsibility for reconstruction and town planning. It subsequently became the 'Ministère de la Construction', covering public works and, on a more or less temporary basis, plant or equipment and housing. The departments for architecture and building are chiefly concerned with the financing of housing development, housing legislation and regulations, improvements in living conditions, etc. Questions relating to the technical and economic development of building industries and professions are the province of the Direction des Affaires économiques.

Apart from these central government offices, there are other services in regions and départements, including departmental architectural services.

Finally, the Ministry is the supervising authority for a number of organizations including the Centre scientifique et technique du bâtiment (C.S.T.B.) which has a very important part to play in the building sector in the matter of regulations, the preparation of technical notices and technical and economic research.

The following ministries are also concerned:

Ministères de l'Economie et du Budget through which all proposals for public expenditure must necessarily pass;

Ministère de l'Interieur et de la Decentralisation whose responsibilities cover local authorities;

Ministère de l'Industrie responsible mainly for supervision of the engineering sector, standardization and development of the building industries;

Ministère des Transports whose spheres of interest often border on those of the Direction de l'Equipement;

Ministère de l'Agriculture for all activities in rural areas;

Ministère du Plan;

Ministère de la Culture for historical monuments and civil buildings.

Finally, mention must be made of the role of local government services as regards both municipal building projects and the issue of building permits.

2.3.2 The role of the authorities in Argentina

It will be recalled that Argentina is a federal country. It is therefore at the provincial level that we find departments of architecture responsible for public buildings and historic monuments that are not municipal. Copies of the architectural plans are also found at the provincial land register which comprises two sections: public works and private works.

At the municipal level there are architectural departments with responsibility for the buildings and lands belonging to the towns concerned, and also departments which approve the plans for private building projects. There are also municipal land registers.

Finally, following the Spanish model, the professional associations and provincial colleges of engineering and architecture receive the approved plans for projects carried out by their members.

2.3.3 Regulations and codes

This administrative intervention is reflected in a considerable number of regulations that have appeared in every country at the national and/or local level according to the degree of centralization in the country concerned. These regulations may be collected and issued in the form of publications. Examples are:

for France: the R.E.E.F. (a collection of useful information for the preparation and execution of building projects and contracts in France) published by the C.S.T.B. (see 2.3.1) which, in a periodically updated encyclopaedia of 17 volumes brings together all building legislation (three volumes), specialized articles on the science of building (one volume), consolidated technical documents, reference texts for all the building trades - non-observance of which is regarded by insurance companies as sufficient grounds for invoking guarantee exclusion clauses (four volumes), rules for calculation with worked examples (one volume), documents relating to technical opinions (one volume), and, finally, building construction standards (eight volumes). These volumes are rounded off by specialized collections relating to particular types of structures or trades;

for the United Kingdom there is a general standard work entitled: Specification 84. Building methods and products. Technical information, specification, clauses, products and service. (Editor, David Martin AA Dip.) which, in five volumes including an index, provides specialized information and references to statutory texts in a remarkably handy and practical form;

the U.S.A. has State codes, a formula adapted to the federal structure and found in many countries.

Finally, French and European regulations have been compiled by AFNOR in its database NORIANE (textual references only).

2.3.4 Building permits - a general procedure

Administrative control has given rise to a virtually general procedure, namely the compulsory obtaining of a building permit prior to the opening of a building construction site. These permits are issued on a widely decentralized basis (region, province, municipality).

2.3.5 Common archival frontiers

From the general remarks above it emerges that for any given project a number of persons or bodies may in some way be concerned: the project designer/supervisor, the client, specialized technical organizations, inspectorates, contractors, government departments, local authorities, professional bodies. Hence the multiplicity of files that need to be kept more or less systematically, a problem to which we shall return in greater detail later.

Furthermore, because of the important part they play, it would be useful to carry out a special study on the architectural archives constituted by the documents produced by design offices, indications of which will be found in the fonds of architects.

2.4 The principal stages in building up a file

These stages are listed below and relate to the main functions in the design, execution and life of the project being carried out, situated within the theoretical framework of a free market economy since this gives the most comprehensive picture.

2.4.1 Design

The preliminary phase, which is of greater interest to the client than the project designer/supervisor, can be rapidly dealt with; it comprises terms of reference, land-use control, the obtaining of planning permission, arrangements for project design and/or supervision, etc., and concludes with the establishment of a detailed schedule giving a precise definition of the project, recapitulating all the data and constraints on the one hand and the requirements to be met on the other. The first operational phase is preparation of the summary preliminary design which represents the project graphically and identifies the technical solutions best suited for meeting the requirements.

Then follows the detailed preliminary design which sets out the data assembled in final form and defines the principles of construction and equipment, type and quality of materials, general procedures and completion times. This is the stage at which application is usually made for a building permit against presentation of a technical file, possession of this permit being a necessary pre-condition for project execution.

Since the work of an architect includes the preparation of projects, particularly in the case of participation in competitions or the drawing up of model designs, it will follow that the relevant files do not go beyond the design stage. The same applies if the architect's task does not include supervision of project execution.

2.4.2 Execution

This comprises the following stages:

Consultation with contractors: the detailed preliminary design is completed by the addition, more especially, of data as regards quality and quantities on which contracts will be based so that the contractors may submit their tenders in full knowledge of what is required. The exact composition of this file varies according to the form of consultation chosen (adjudication, invitations to tender, competition, etc.).

Assistance with contracts: this directly complements the previous stage and consists of assistance to the client by the project designer/supervisor in regard to consultations with contractors and the placing of contracts, and the provision to contractors of any additional information of use to them; this stage is completed on signature of the contracts.

Drawing up of the detailed technical specifications and project execution drawings: checking of contractors' technical drawings by the project designer/supervisor.

General supervision of works.

Acceptance of work and interim certificate: reception marks the end of the period of project execution and the start of the various guarantee periods.

2.4.3 Life of the construction work

This concerns operations subsequent to acceptance, namely: withdrawal from site, agreed final account, handing over of the completed construction

work to the client or agent, maintenance and guarantees, possible claims. Special mention should be made of the file of completed works: this is prepared by the project designer/supervisor for submission to the client or agent with a view to the utilization of the completed building. It comprises all instructions concerning functioning, the general plan and detail plan in accordance with project execution, contract documents of relevance to the use and maintenance of the work and specifying the rights and obligations of the project designer and the contractor.

3. THE COMPOSITION OF A FILE - FROM FILE TO FONDS

The principal stages that we have just described are directly reflected in the archives. To start with, rather than make vague general observations, we have preferred to present an existing file, namely that for the construction of an archives repository in France - the Departmental Records Office of Seine-Saint-Denis in the Paris region. Following this presentation we shall attempt to describe the main types of graphic documents to be found in these files which, when assembled, form the archival fonds.

3.1 File on the construction of the Departmental Records Office, Seine-Saint-Denis

This operation covered the period from March 1979 to April 1984. The relevant files occupy 3.60 linear metres of shelf space, to which must be added some 200 rolled up drawings and one model.

The following firms and authorities were involved:

Client: Département de la Seine-Saint-Denis. Administration responsible for carrying out the project: Direction départementale des bâtiments, architecture et services techniques. User of the building: Direction départementale des Services d'Archives (Ministère de la Culture, Direction des Archives de France: subsidy and technical opinion).

Project designers/supervisors: B. Feypell and E. Zoltowski, architects; design office; art design office; supervising office.

Site planning: SEMARBO (Semi-public company for town planning and renovation of the town of Bobigny).

Contractors: 22.

We shall now describe this file as kept by the architects, indicating the metric length occupied by each part:

3.1.1 'Written document' files (including prints of drawings)

Summary preliminary design (0.05 lm): drawings (15): layout plan, floor plans, sections, front elevations; explanatory notice: site, schedule requirements, choice of architectural design, access, building principles, gross floor area, summary estimate.

Building permit (0.05 lm): same drawings plus arrangements for service connections, similar explanatory notice plus safety notice; building permit application form, administrative correspondence (conclusions of authorities consulted), building permit.

Detailed preliminary design: an almost identical file.

Consultation with contractors (0.35 lm):

'written documents': building specifications and bill of quantities (by item of work), contract bill of special administrative clauses, special tendering instructions;

drawings: architect's drawings (taken from the detailed preliminary design; drawings for internal fixtures and fittings and for each item of work; safety plans.

Assistance in respect of contracts (0.08 lm): analysis of tenders (subfiles by item of work: notice of invitation to tender; dispatch by the project designer/supervisor of tenders received (lists of firms submitting tenders), tender analysis reports and general report (in duplicate).

Ditto (0.10 lm): contracts (subfiles by item of work): undertakings by contractors, any revisions and further correspondence.

Project execution plans (1 lm): contractors' drawings (by item of work) and, possibly, design office reports.

General site supervision:

'general' correspondence (0.15 lm): engineering, Bureau Veritas, SEMARBO design office, Regional Commission for real estate operations, PTT (Post and Telegraph Service), Fire Service, etc.

correspondence with contractors (0.15 lm): memoranda, claims (subfile for each contractor);

correspondence with the client (0.13 lm);

correspondence with the user (0.05 lm);

site reports (0.10 lm);

file on the statutory allocation for works of art of one per cent of the total cost of the construction (negligible space).

Acceptance of work (0.10 lm): reports of proceedings prior to acceptance, lists of reservations, acceptances with reservation, reports on services performed or tests that gave rise to reservations at the time of acceptance, reports on the lifting of reservations, notifications.

Claims (0.10 lm): reports of experts, correspondence, case documents.

Miscellaneous file entitled 'written documents' containing copies of the most important papers or those from which prints might be made (written documents on a transparent medium): building permit, list of drawings, descriptive notice of the detailed preliminary design, this file being regarded as a current management tool and not as a dossier for retention (0.10 lm).

3.1.2 The accounts file

This contains written documents only and is clearly identified firstly by the fact that it is kept by a person with special competence in the architect's office and secondly by the fact that it relates solely to the phase of execution. It alone occupies 1 lm and is made up as follows:

Contracts and service orders: contracts, contract bills of special technical and administrative clauses, estimated construction schedule, site regulations, study reports, bills of quantities, invitations to tender, contracts signed by contractors (files by item of work).

Interim payments: interim certificates and provisional payments made; price adjustments (files by item of work).

Agreed final settlement: projects, balances (files by item of work); final report summarizing the whole of the work done.

General accounts file: breakdown by stage of work, updating of target costs, estimated time-table of work, construction schedules signed by the contractors.

File for architects' fees.

3.1.3 'Negatives' and models

We have seen that the files contain numerous drawings in the form of prints. The original architect's plans drawn on a transparent medium and serving as 'negatives' for the production of prints are kept, by reason of their size and shape, in rolls (see 6.2.2); there are about 200 of them, classified as follows:

Rough plans (building site plans), summary preliminary design (numbered 1, 2 ...).

Detailed preliminary design (numbered 11, 12 ...) and 'negatives' of plans made by the design offices.

DCE: drawings that have been used for the invitations to tender (numbered 101, 102 ..., particular groups being specified by letters (D: decoration, etc.). List at annex.

Project execution plans: additional drawings made after the opening of the site (numbering following that of DCE drawings).

Contractors' drawings in the form of prints make up one of the files listed in 3.1.1.

A model of the structure being built also requires special separate custody (see 6.2.5).

3.1.4 Miscellaneous files

We have already mentioned the existence of a miscellaneous file containing the most important project documents (see 3.1.1). In the same way, duplicates of documents whose rapid retrieval is of particular importance for day-to-day management can be kept in separate classified groups in the

secretariat of the architect's firm. These include: building permit, contracts, descriptions, photographs of works.

3.1.5 Files kept in the public archives

The files that we have described belong to the archives of the architect. In accordance with what has been said regarding building regulations (see 2.3) any such project is bound to leave its mark in the public archives produced by the government department or local authority concerned, particularly when, as in this case, the project relates a departmental public building constructed with government financial aid. The public archives will therefore include:

a building permit file;

a file for submission of the project to the Regional Commission for real estate operations (CROIA);

the client's file - the Direction départementale des bâtiments - which will continue to grow with upkeep of the building;

a file for the Ministère de la Culture (Direction des Archives de France: approval of programme, technical opinion following perusal of the final preliminary design file, allocation of government subvention.

The problem of safe custody and the rules governing appraisal of these documents lie outside the scope of this study, and we shall therefore do no more than mention the existence of these files, pointing out that the period of conservation depends upon the local rules in force.

Obviously, when the client belongs to the private sector, it will be his private archives that will contain the documents that here pertain to the Département, and, more specifically, the file of works completed, the importance of which will become apparent later (see 3.4).

3.2 Formalization of the documentary structure

3.2.1 Correlation between the phases of an operation and the documents

Set out below, side by side, are the principal phases already described (see 2.4) and the main documents prepared, a distinction being made between written and graphic documents:

Graphic documents	Written documents
0 - Preliminary phase	
(documents which may be entrusted by the client to the project designer/supervisor)	
Topographical survey	Programme
	Town planning certificate
	Preliminary feasibility study

Feasibility study agreements and agreement covering the distribution of tasks

Summary budget estimate

I - Design

Summary preliminary design

Preliminary layout plan

Preliminary technical studies: feasibility, ground, climatic features ...

Study models

Check on budget estimate

Drawings illustrating the choice of architectural concept

Explanation of the architectural concept

Detailed preliminary design

Working drawings (including general earthworks and installation of main services)

Sundry studies

General estimates check

Summary description

Model

Building permit

Application for financing (if applicable)

II - Execution

File for consultation with contractors (according to the form of consultation)

Detailed drawings

Contract bill of particular technical clauses

Specifications and bill of quantities (if applicable)

Schedule of prices (if applicable)

Contract bill of particular administrative clauses (public contracts)

Contract bill of particular clauses (private contracts)

General construction schedule

Contracts (model instrument)

Assistance with contracts

Tenders

Analysis of tenders

Contracts and specifications

Execution of works

Project execution drawings (siting, structure, special items)

Detailed technical specifications

General site supervision

Time-table, planning

Records of site meetings

Payments due and payments on account: interim accounts, statements of work carried out and contractors' memoranda

Price adjustments

III - Works completed

Handing over to the client or agent

Drawings of completed works

Notices concerning functioning

Contract documents in force

Life of the structure

Guarantee, and possible claims

Maintenance and works

The above list shows that the graphic documents are prepared at well defined stages and divided into distinctive categories.

3.2.2 Definitions

These definitions apply only to graphic documents, which are conventionally divided into two categories: cartographic documents (maps and plans) and iconographic documents. However, there is a category that immediately invalidates this distinction, namely the architectural drawing which may combine a plan with the representation of a detail of decoration or a part of the building.

The first group traditionally includes maps, i.e. the small-scale representation on a flat surface of a fairly extensive part of the earth's surface or of a heavenly body, and plans, i.e. the representation of still smaller surfaces, very large-scale maps or representations of buildings or other objects (broad definition). Strictly speaking, a plan is the graphic

representation of a building in horizontal section. In its broader sense however it will also include representations of a building in vertical section (cross section or longitudinal section). The elevation, i.e. the graphic representation of one of the sides or interior faces of a building; detail plans, i.e. large-scale drawings specifying, in the form of a horizontal profile, section or elevation, details of the construction, structure or profile of a part of the building; the layout plan which is a small-scale plan showing only the construction boundary.

The plan is generally a geometrical representation but it may be drawn in perspective, when it is called a perspective plan. Axonometry means the graphic representation of a building by orthogonal projection which enables horizontal profiles, sections and elevations to be combined in a single drawing; one of these views is represented geometrically, the value of angles and dimensions being respected, whereas in the others the dimensions are respected but the angles are modified.

A distinction is made, according to whether they are drawn free-hand or with guiding instruments, between:

A rough sketch, generally drawn free-hand and illustrating a simple idea or amplifying an explanation.

A rough plan, generally drawn free-hand to small scale and outlining the architectural concept. This is the first graphic expression of a programme.

A sketch-plan drawn free-hand or with instruments, is confined to representing in simplified form the essential features and functions of the building, systems or technical installations.

The design, drawn with instruments, perfects and finalizes the rough plan.

Diagrams and graphs drawn with instruments serve as aids to calculation (resistance of materials, statics, etc.) or for the determination of exact shapes.

The project plan is the representation in horizontal profile, section and elevation of the building to be constructed.

The preliminary design groups all the drawings prepared on the basis of the last study for the purpose of obtaining the agreement of the client or the administrative authorities concerned. It shows, in general, the principal dimensions of the rooms and spaces and is drawn to a scale of 1-2 cm to the metre. It comprises the general plan and sometimes layout plans on a reduced scale. The general plan indicates the respective positions of buildings or structures within the whole site, and such features as road systems, frontages, hydrants, etc. The layout plan with buildings shown in outline only is used a great deal in town planning.

The project execution plan consists of the collection of drawings based on the preliminary design with a view to the definitive execution of the project. It comprises general plans and detail drawings indicating all dimensions together with full information of relevance to the execution of the works. The general plans are drawn to a scale of 2 cm to the metre unless the dimensions of a building are too large or there are a

number of identical bays. In such cases the scale is 1 cm to the metre and the plans are completed with all other necessary drawings to a scale of 2 cm to the metre. Detail drawings are drawn to a large scale (5 cm to the metre as a rule).

These files are generally accompanied by perspective views of all or part of the building with cavalier or axonometric representations which give a precise picture of the building. They are generally touched up, i.e. special effects are added (usually shadows) which enhance the subject. The survey drawing is the representation in horizontal profile, section and elevation of an existing building.

A model is a representation (usually on a small scale) of a building or part of a building in relief (the model of a town or part of a town is called a relief plan). Finally, restitution means the representation by means of drawings or models of the presumed appearance of a building that has been damaged or destroyed.

These plans and drawings are found for all practical purposes in two physical forms in the files that here concern us, namely: 'negatives' (plans drawn to originals) on a transparent medium and tantamount from which the prints (see 6.2) are made. It should be noted that such 'negatives' can be altered by erasure (alterations and their dates being normally indicated). Accordingly, a print cannot be considered a priori as a mere copy; it corresponds to the state of the original 'negative' at a given moment after which the state of the 'negative' may have changed or special annotations may have been added.

At the same time we must bear in mind the existence and constant updating of the standards, both international (ISO) and national (e.g. AFNOR for France) applicable to these specific types of documents and designed to promote standardization and harmonization of practices (list for information at annex).

Finally, there is another type of representative document - the photograph - that is tending to occupy a larger and larger place in architects' archives. The photograph is in fact becoming an increasingly useful aid, particularly since the advent of instant cameras. Whether serving as working documents covering precise points or used for the purpose of systematic surveys or illustrations of work carried out, photographs constitute a form of representative document of appreciable value.

3.3 Files that form the archival fonds

We have so far considered the file of an individual project from initial design to completion. Some files may be less extensive and simply cover, say, design alone, maintenance works, restoration, etc., but they none the less correspond to cases that are quite separate. Their totality constitutes the archival fonds of the architects' firm from which they derive a fonds which will also contain other types of file which we shall describe briefly below:

3.3.1 General management files

There naturally exists a group of general files concerning the firm's composition and management, general correspondence (possibly recording and duplicating of all correspondence), personnel, fees, relations with professional associations, etc.

3.3.2 Files covering other activities

Such activities may be educational work, participation in various bodies and administrative committees, adjudication panels, the preparation of special reports or studies, or even an artistic or literary work.

3.3.3 Documentation

Every architects' firm has for its day-to-day operation a documentation unit, which may or may not be relatively highly developed, where technical and possibly legal documents are filed and kept up-to-date. These files do not warrant archival custody, the documents being discarded as soon as they are out-of-date.

On the other hand, the files of specific documentation brought into being for a project handled by the firm have to be preserved with the technical file for that project, as do the respective files of press reports and photographs.

3.3.4 Examples from the fonds of Laprade and Le Corbusier

The archival fonds of Albert Laprade, stored in the National Archives (subgroup 403 AP), provides examples of files that testify to the diversity of an architect's activities and illustrate the question of the documentation referred to in 3.3.3. The files on works carried out in Morocco are accompanied by general documentation on the country, its casinos and large hotels, articles written by Laprade on Lyautey and Morocco (403 AP 9 and 10). The files for the building of the Génissiat dam include a file of photographs and documentation on dams, on the opening of the Donzère-Mondragon dam and press cuttings from specialized journals (403 AP 52), to confine ourselves to just two examples from this architect's fonds (see list at annex).

The case of Le Corbusier, versatile artist that he was, offers the perfect example of a fonds that is truly multi-faceted: associated with the plans, models and files of town planning and architectural projects are artistic works such as paintings, drawings, lithographs, collages, enamels, tapestries, sculptures, together with furniture, published literary works, plus supplementary documentation covering works on Le Corbusier, a collection of photographs, films and records.

Clearly therefore when attempting to tackle the question of archival fonds we are faced with a whole set of documents and collections that must be given a systematic structure (see section 5).

3.4 An important absentee: the file of completed works

Reference has been made several times to the constitution, on termination of a project, of a file of works completed comprising more specifically a complete set of drawings showing the actual state of execution (see 2.3.4 and 3.2.1). This file, which is of obvious interest inasmuch as it provides evidence of the work actually accomplished and constitutes a final general recapitulation of all that has been done, is handed over to the client or agent. It is not systematically retained in the archives of the project designer/supervisor and from the archival, and, ultimately, the historical standpoint this represents a grave omission.

As an indication of what its contents may be, we reproduce at annex the composition of the file handed over by the government to the Société des autoroutes Paris-Rhin-Rhône (Paris-Rhine-Rhone Motorway Company) for one subsection (civil engineering works).

4. APPRAISAL AND PRESERVATION

4.1 Justification for archival custody

4.1.1 The reasons for preservation

The general principles have already been made clear (see 1.2.3). It is evident that to start with documents have an immediate practical value corresponding to the purpose for which they were produced: documents relating to a structure are of immediate, direct value so long as no substantial alterations are made to the structure; documents prepared more recently which take into consideration the alterations made supersede the original documents as a matter of course. This first phase is followed by a phase of 'precautionary' custody imposed by the guarantee periods and also by tax and accounting regulations; such considerations require that the files be kept for a certain period following final acceptance of the works. Since experience shows that problems often arise at the end of the guarantee period, it is all the more necessary to have easy access to the files on projects that were completed several years previously.

This goes to show once again how useful it would be to make a study of the relevant legislation and regulations.

The preservation of archives by the project designer/supervisor also offsets the indifference to this problem generally shown by contractors, especially in times of economic stringency. There is, of course, no need to stress the practical importance of being able to consult the relevant files when carrying out maintenance work or repairs on a building (so important is this that French television recently offered its assistance in trying to track down the archives of a particular building).

Finally, the historical and cultural interest of these files, albeit indirect but increasing as the years go by, must be borne in mind as another good reason for their proper preservation.

4.1.2 The need for appraisal and elimination

We shall confine ourselves here to recalling what was said earlier in 1.2.4.

4.2 Practical approach

4.2.1 Evaluation of documents

Assessment of the value of archives is a matter of judgement which cannot help but be subjective. However, the subjective element can be reduced by determining the criteria to be met and the purpose served by different types of document: primary and immediate value with reference to legal provisions or to regulations, or practical usefulness, then secondary or historical value, and finally the density of the information contained.

Various procedures are followed: extraction of examples or specimens, deliberate or qualitative choice of documents preserved on the basis of intrinsic criteria, selective or systematic appraisal on the basis of extrinsic criteria (following a pre-established model), random sampling.

4.2.2 Can architectural documents be appraised?

Unfortunately for those seeking to analyse this aspect of archival practice, the existing archival literature on architectural documents makes no reference to appraisal procedures. What authors unanimously deplore is the disappearance of fonds or their bad state of preservation, this apparently without considering anything but the safe custody of what are essentially graphic documents considered more as museum exhibits than as archives. The few references to appraisal relate to archives which are strictly speaking administrative archives, and the reply of French archival organizations to the survey by the International Archives Council illustrates this: there is no systematic procedure for appraisal, or even for arrangement, except as regards the elimination of redundant copies where several copies of a document are held.

It is therefore impossible to make a proposal that can be supported by solid precedents. We have therefore chosen to examine the problems one by one, first taking the case of isolated cartographic documents, then that of the file and finally that of the archival fonds as a whole.

4.2.3 Isolated cartographic documents

These are maps and plans grouped in collections and best described in the words of F. Hull (The use of sampling techniques in the retention of records. RAMP Study, 1981, 4.5): 'In general terms, maps, by their very nature, are unsuitable for sampling. Except that duplication can occur, or photographic enlargement or reduction, each map (just as any other record) will be individual in that it contains some specific and unique information'. When documents are eliminated this is done because they are not relevant to the subject of the collection which rejects them; they are transferred to other archival services that may be interested.

4.3 Appraisal within a particular file

There are two stages to be considered: intermediate appraisals (carried out between the closure of a file and its final transfer to archival custody) and definitive appraisal.

It must be remembered that the proper upkeep of a current file demands immediate destruction of 'rubbish' (duplicates, additional copies, rough notes, etc.) that clutters it unnecessarily.

4.3.1 Intermediate appraisals

Action when a file is closed: systematic elimination of superfluous copies (if this has not already been done) and files whose contents are repeated elsewhere. These are mostly files concerned with contracts that may be kept in the technical file or the accounting file; it goes without saying only the signed documents need to be preserved.

Action after final settlement: elimination of records of payments on account.

Action after five years: elimination of invitations to tender and replies from contractors whose tenders were not accepted, and of correspondence preceding the placing of the contracts.

Action on expiry of the guarantee period. We shall here take the example of the builder's liability in France, where builders are required to give three separate guarantees commencing from acceptance of the works. These are, firstly, the guarantee of 'perfect execution' covering damage and bad workmanship that may come to light during the 12 months following acceptance; secondly the two-year guarantee for the proper functioning of equipment which could be replaced without adverse effects, and finally, and most importantly, the ten-year guarantee covering damage to the fabric of the building (law of 4 January 1978).

Consequently after ten years, and in the absence of any claim, the following actions may be taken: appraisal if required of files on execution of work; retention of all plans relating to the structure and to fluids; elimination of contracts placed at wholesale price.

Action on expiry of the prescription period under ordinary law. It should be noted that in case of fraud by the builder, the guarantee periods of two and ten years are cancelled and the ordinary law requirement of 30 years applies. Architects may also assume responsibility for matters other than the erection of buildings. They may for instance be involved in lawsuits arising from the operation of their firm: money owing for supplies, accidents, etc. In all such cases they are subject to the normal provisions of public law which, in France, imposes upon them a prescription period of 30 years. Once this period has elapsed definitive appraisal is thus theoretically in order.

However, it is obvious that any legal dispute may necessitate prolongation of the time of custody beyond those periods and also that experience often dictates that records be preserved longer than legal provisions require.

These considerations, set out very briefly above, lead to intermediate appraisals, based essentially on periods which are fixed by law, which leave a large volume of material to be sorted with a view to definitive storage. Finally, it must be remembered that French practice, taken as our reference example, cannot be considered universally valid; the guidance given for appraisal and the periods for which certain material must be kept must be adapted to the legal provisions of the country concerned.

4.3.2 Final archival custody

At this stage final custody of the documents concerned and the requirements of historical research become of prime importance, all legal and official obligations having been fulfilled.

The main objective must be to be able to offer a description of the building and of the approach of the architect who designed it. It is thus clearly desirable that the architect should systematically keep a copy of the file of buildings completed, i.e. a general recapitulation (see 3.4), which would assist in the orientation of appraisal policy. If such a file does in fact exist it will as a rule suffice to recommend the preservation, in addition, of documents corresponding to the design phase up to and including the execution plan and, save in cases of exceptional interest, disposal of the

documents corresponding to the execution phase which will be found in summary form in the file of completed buildings.

The fact remains that the papers concerning the execution of the work are of real interest for the history of architectural practice, which must of course militate in favour of their preservation in all cases where the technical aspects are of particular importance.

Experience of the records kept by contemporary architects proves that they cannot be urged too strongly to keep a copy of the file of buildings completed. Such preservation, scarcely systematic at present, would facilitate alterations subsequently made by the architect to buildings for which he was responsible and also offer an easy solution to the problem of final archival custody.

In the many cases where this solution cannot be applied it is impossible to lay down hard and fast rules for the appraisal of files, which reach the stage of final archival custody in a variety of States. The main recommendations might be perhaps as follows:

retention of documents corresponding to the design phase, including rough plans, contracts;

then starting from final acceptance and working back in time, decide which documents to preserve on the basis of their age, giving priority to the more recent documents that were drafted closest to the time of actual completion of the building;

priority given to retention of documents relating to structure and fluids;

preservation of documents on important contentious matters;

systematic retention of recapitulatory documents (especially accounts);

systematic elimination of everything strictly concerning maintenance;

in the case of plans, elimination of duplicates after careful checking (do not forget that the original 'negatives' may have been altered, whereas a print records only the final plan corresponding exactly to the building erected);

in all cases account must be taken of the overall state of the fonds to which the files belong.

4.4 Appraisal at fonds level

Every file must in effect be viewed in relation to the fonds to which it belongs. A fonds should be processed in terms of what, in view of the impossibility of finding an objective definition, we may call its 'value' together with its physical condition and perhaps the problem of overlapping.

The questions that must be asked and answered by the archivist and architect, preferably jointly, are:

Does the architect have a particular area of specialization?

Is it necessary to preserve the files on all the architect's projects?

If not, what selection criterion should be adopted?

There are several possibilities, some of which can be combined:

Preservation of sample specimens of repetitive projects of no particular originality.

Preservation of files on certain projects deemed to be of particular interest.

The question then arises of defining this interest:

Firstly in terms of intrinsic criteria (not to be confused with sentimental values of any kind): projects considered of particular interest by the architect himself, achievements considered innovative or as having social implications, and so forth.

In terms of extrinsic and purely objective criteria: the quantitative criterion of the amount of money or surface area involved (thresholds to be fixed according to the average for projects handled by the firm). It must also be remembered that these large-scale projects will often be orders from the public sector and that the files may in that case be preserved in public record offices.

In practice it is very often the state of preservation of the fonds which dictates the reply to these questions, and then the reply can only be systematic if strict rules have been applied from the time the file was started. It must also be recognized that for such fonds individual cases are the general rule, by virtue of the different personalities of the architects, and the diversity of their work and of their methods of archival practice. One cannot therefore lay down hard and fast rules but only give general indications.

4.5 Microfilms as a substitute

We mention this briefly since, as is well known, microfilming should not be used to solve the problem of appraisal simply by making it possible for all the files to be preserved in full in a reduced space. Still very costly, not accepted as evidence and difficult to consult, microfilm cannot be considered a practical solution to the problem of appraisal. On the other hand we shall see (cf. 6.3) how it can assist in preservation.

4.6 Official records

We shall briefly describe two examples of the preservation by administrative authorities of files on similar subjects:

4.6.1 Argentina (see 2.3.2)

The administrative file consists of three parts:

an accounting part: payment of fees for building permits; receipts for fees paid to the College of Architects and Engineers; declaration of freedom from mortgage;

a technical part: general site plans (6 copies); technical drawings (6 copies); plans of works completed (3 copies);

'Resolución final' (Final decision): final approval of the work, simple stamping of the plans for the individual residential units or official authorization from the Provincial Department of Private Works.

Once this approval has been given, copies of plans are distributed as follows:

general site plans: one copy to the College of Architects and Engineers;

technical drawings: one copy to the College of Architects and Engineers, four copies retained in the archives of the Department of Private Works;

plans of works completed: original to the Department of Private Works, one copy to the provincial land register, one copy to the municipal land register.

The Department of Private Works eliminates the accounting documents (kept by the municipal treasury department and the unexecuted general site plans, while keeping the original of the plan of works completed and one copy of each execution plan for buildings, plus the final authorization. The documents are classified on a topographical basis.

4.6.2 France: the archives of the 'Directions de l'Equipement' (see 2.3.1)

A schedule of these archives shows the duration of their custody by the department from which they were transferred and proposes criteria for their appraisal after transfer to the departmental archives (circular number 80 - 58 of 17 April 1980). We have reproduced as an annex the first two parts, which are the most relevant (town planning/land development; building construction), indicating the types of document produced by the administrative departments and the stringency of the appraisal procedures to which they may be subjected.

5. CLASSIFICATION AND FINDING AIDS

5.1 Where does classification start?

5.1.1 The work of the secretariat

It is upon the management of current archives, their proper upkeep and the first principles of classification applied to them that the quality of their future archival custody largely depends. One could of course hardly expect a secretary to carry out the work of a qualified archivist, but application of a certain number of rules will make for straightforward transfer to the stage of archival custody and ready retrieval of files wherever they may be housed: files kept in proper order, the elimination of 'rubbish', the assignment of a project number (see 5.2.2) and recording of files (see 5.2.3).

5.1.2 The work of an archives service

Besides proper storage and ordering of archives, the task of a specialist service is to ensure document processing, i.e. appraisals, eliminations (cf. 4), final classification, description in the relevant finding aids and placing at the disposal of the public.

If the files have been built up in a rational manner, the work of the archives service will be made that much easier. Otherwise, it will have to start again from the beginning, defining a classification scheme and rules for the internal arrangement of files.

5.1.3 Closed and open record groups

The way in which archives are processed will differ according to whether they belong to an open record group or a closed record group. Closed record groups are those to which nothing more can be added (the firm concerned having ceased its operations); open record groups are composed of successive transfers representing the periodical output of firms that are still in business. Such fonds will therefore continue to expand, and their archival processing must take account of this; they must be flexible and allow for logical arrangement of successive transfers. On the other hand closed record groups demand exhaustive processing which takes into account the whole body of documentation, to which no further changes will be made.

5.2 Project files

5.2.1 Dispersed files

The file on the Seine-Saint-Denis Department Records Office (see 3.1) was split among three separate locations by its architects: the 'written documents' file kept by the secretarial service, the accounts file in the accountant's office, and finally the plan 'negatives' kept first in special filing cabinets in the draughtsmen's office and then stored in rolls.

Obviously, once a project has been concluded the first two elements of the file, which are of identical format, can easily be brought together but the negatives pose a problem because of their size.

This problem of split storage has to be faced by all architectural fonds: plans and drawings kept flat or in rolls requiring special storage facilities but none the less still needing to be near the corresponding written documents. The same problem arises with models.

Photographic documents and microcopies, if any, must also be properly stored.

5.2.2 Evolution from project number to archive reference number

This problem of linking up the different parts of a file formed by documents of different format needs to be faced from the moment a file is started. The usual practice is to assign a number to every project (not to each client, as this would make it necessary to keep subfiles for clients who place several orders, to take account of possible changes of name and distinguish between the address of the client and that of the works). Every document included in the project file will bear the project number.

Two systems of numbering are possible:

a single number indicating the chronological order of projects handled by the firm and serving as simple reference number;

a composite number to indicate the year in which the file was opened and the serial number within that year or else indicating the nature of a project by a letter or letters plus the project serial number. This system leads to separate classification by subject and in effect constitutes a rough classification scheme.

The first system is recommended because it is simpler and makes for easier shelf space management. The project number can easily be adapted as an archive reference number indicating the physical location of the file. The files are arranged in parallel series: plans/drawings in parallel with written documents according to their respective formats. Obviously ordered shelving is essential: every completed project must be stored in its right place and not placed randomly in the first space available.

We should add that the project number can also be systematically entered on all relevant correspondence in order to assist subsequent archival arrangement.

5.2.3 From record entry to finding aid

As files are opened they can be entered in a list indicating their subject-matter and number.

A more elaborate system is to keep a card for each file listing the file's different components and enabling its contents to be taken in at a glance. These cards - of which one or more copies can be made - will be filed in one or more card indexes in which they will be arranged in order of project number and possibly according to the classification scheme that seems most appropriate to the activities of the firm (see 5.4.1).

Once the file is closed, this card becomes a veritable inventory; the fact of the transfer of the file need only be shown and the number will enable it to be located physically. It serves as a link between the two parts - the plans/drawings and written documents - and allows these documents, which are arranged in separate series, to be united. If this card inventory is not kept up-to-date with each new addition to the file, its establishment will become one of the tasks of the archives service.

5.2.4 Detail of classification

Hitherto we have referred to recording and indexing without considering the possibility of itemized description of the files. Obviously the ideal classification would classify files and describe their contents in detail (finding aid of inventory type). But the sheer volume of documents makes this Utopian vision (devised by H.E. Perkins in 1890 in the U.S.A.) impracticable: Perkins's system distinguished general design outlines, execution plans and detailed technical working drawings, all serially numbered (with unused numbers between each category and distinctive letter suffixes for execution drawings) and described in an 'index' (number, title, draughtsman, date, place of custody); for written documents he defined three series: correspondence, contracts and specifications.

This system was hardly ever used in practice. The same applies to the 'Chauleur system', published under the name of its authors by l'Architecture française, which requires all documents to bear a reference consisting of a code (identifying them topographically and by type of construction), a reference number proper (project number) and a variable element (stage of project study and serial number of item). Thus for instance, reference 67 F 482 A 46 b 8 signifies that the project is located in the Bas-Rhin department (code 67), in France (F), in Strasbourg (INSEE* municipality no.: 482), that

* Translators' note: The French National Institute of Statistics and Economic Studies.

it relates to a private residence (symbol A), that it is the 46th project handled by the firm, that it belongs to the rough plan (symbol b) and is the 8th section of that plan.

This system also envisages item by item recapitulation on the cards classified according to type of construction.

An ideal method, but hardly practicable because of its complexity, it would make great demands of the secretarial staff and call for strict discipline on the part of all concerned.

Item by item description of documents can be justified in exceptional cases, such as the work carried out on the Le Corbusier files by the Le Corbusier foundation, an example of which will be found in an annex.

More appropriate in most cases is the recording in an inventory of the files built up as a project proceeds. This method ensures adequate identification and easy transfer to a finding aid considered by practising archivists to be adequate for modern fonds. It does not preclude recourse to more sophisticated cataloguing for graphic documents (see 5.4).

5.3 The fonds as a whole

We have so far considered only project files, but it must be remembered that an architect's archival fonds will also contain other types of file (see 3.3).

5.3.1 A classification scheme

The model plans drawn up to deal with company archives in general must be adapted to the special characteristics of architects' archives. The following scheme is proposed:

A. Constitution and mode of operation of the firm

Legal status: articles of association, relations with professional organizations, enrolment, licence to practise, etc.;

board of management;

general activities and management: memoranda, reports, statistics, etc.;

general correspondence;

staff (personnel files);

general accounting;

archive inventories (if applicable).

B. Project files

Classification in numerical order by project number (see 5.2.2) - and classification according to subject reflected in the finding aid (see 5.2.3) may be dissociated and the description of files based on a classification scheme appropriate to the business of the firm concerned: projects may be classified according to geographical location, or a

distinction may be drawn between public sector orders and private sector orders and projects arranged in chronological order within these separate categories; projects may also be classified under the names of the clients, who may be listed in alphabetical order or in order of their geographical location; the division may be between projects which were not carried out and completed works, etc.

There is no need to return to the question of the arrangement of material within the files, a question that has already been dealt with. It will normally follow the phases of the operation in chronological sequence. This is the order that needs to be re-established should the documents become completely disarranged.

C. Other activities

Studies, expert reports, consultancy, commissions, adjudication panels, education and training, research, etc.

5.3.2 Reference number and finding aid

The numbering will reflect the classification scheme, three groups (A, B and C) being distinguished. Continuous numbering, making no allowance for the inclusion of any further transfers, may be preferred for closed fonds.

There is no point in returning to the subject of the finding aid, which was referred to in connection with the project files (see 5.2.3 and 5.2.4), except to remark that its efficiency can be improved by an index (geographical names and, in some cases, the names of clients) which opens up more possibilities for the grouping of material and interrogations.

5.4 The scientific cataloguing of cartographic documents

We have just seen that the content of a fonds as a whole must be described by means of a list, the more detailed method of item by item inventory of documents only being employed in exceptional cases.

But there are documents which can be dealt with on a more detailed and individual basis - those demanding special measures for their preservation, namely graphic documents. These are thus listed in finding aids of the catalogue type that group them methodically regardless of the order in which they are stored. In fact while the principle of provenance (see 1.2.1) makes it impossible to dissociate them from the body of documents of which they form part, there is nothing to prevent their being drawn to the user's attention separately.

5.4.1 Collections of isolated documents

We have already discussed the matter of classification schemes for fonds (see 5.3.1). In the case of collections, the documents are grouped according to a methodical scheme, generally on the basis of geographical location. Within each scheme progress is from the general to the particular (layout plan, general site plans, detail plans) or else in chronological order if the documents are precisely dated or in alphabetical order of titles. Documents may also be classified on the basis of format, or even of the material on which or the way in which they are drawn up.

5.4.2 The descriptive entry

The rules of cataloguing have been the subject of detailed study and when applied to archives they incorporate a number of museographical practices. We reproduce below the list of headings that may be found in a catalogue notice as set out in the descriptive card list prepared by the ICA/PAR working party which is attached as an annex:

The archival fond or collection to which the document belongs

Reference number within the fonds or collection (possibly the old reference number)

Place of custody

Type of map, plan, or architectural drawing

Measurement employed

Scale (restored if necessary)

Caption/legend

Amendment sheets

Physical condition and possibly number of items (for atlases)

Medium

Technique

Style of drawing (for manuscript plans)

Overall dimensions

Place of execution

Date of execution (or if not known, the period)

Draughtsman

Architect/designer

Engraver

Editor

Title and inscription (exact or restored)

Description (cartouche, dedication, etc.)

Country, region, municipality, etc.

Original name of building

Type of building

Client

Project supervisor/prime contractor

Date of construction

Bibliography, historical remarks

Existence of photographic reproductions (if any)

Catalogues should also have an index, especially in the case of collections covering a variety of subjects.

Models can also be catalogued.

6. PHYSICAL PRESERVATION

6.1 General conditions of archives preservation

6.1.1 The causes of damage to archives

All organic documents contained in archives are extremely delicate and easily damaged by a variety of physical, chemical and biological agents. To this must be added the risks of fire and flood, not to mention damage or loss caused by human agency: theft, careless handling, unsuitable methods of preservation or restoration. There are thus four main categories of destructive agent:

environment: light, humidity and temperature, atmospheric pollution, fungi, insects, rodents;

poor quality of materials used to make the document;

disasters and accidents;

human agency.

6.1.2 Proper storage arrangements

Three factors are involved - packing, shelving and premises - which we shall here consider only briefly, referring the reader to specialist works for more detailed information.

The packing of archive documents must be undertaken with particular care as they are seldom protected by bindings or casings and have a wide variety of formats. The best solution is to use boxes or cartons made from neutral chemical pulp (for plans/drawings, see 6.2 below).

Metal shelving is considered the best guarantee of safety. It should be one millimetre thick and a one metre shelf should be able to carry a load of 100 kg without bending. The floor loading should be about 1 tonne per square metre for fixed shelving. Adjustable compact shelving saves space but is more fragile, more expensive and requires a floor loading of 1.8 - 2 tonnes per square metre.

The room selected must therefore have an appropriate floor loading. Protection must be assured against sunlight (maximum 10 per cent of surface consisting of windows, rows of shelving at right angles to windows). Electric

wiring must be conduited and there must be no water pipes above the documents. It is essential to ensure stable climatic conditions with no sudden changes in temperature, which are particularly harmful to the documents. The recommended range for paper documents is 18° C ± 2 and relative humidity 55 per cent ± 5. In the absence of air-conditioning, good ventilation and air circulation are essential (for black and white photographs: 12° C ± 1 and relative humidity 35 per cent ± 5; for coloured photographs: 5° C + 1 and relative humidity 35 per cent ± 5; for magnetic tapes: 18° C ± 2 and relative humidity 40 per cent ± 5). Provision must be made for fire-fighting by placing one or more powder extinguishers near the entrance to the room or just outside it (archive fires are classed as dry fires).

6.2 Problems specific to cartographic documents

6.2.1 Stowage of maps and plans; facilities for viewing

The method of storage of maps and plans is primarily determined by their size, which is always greater than that of ordinary archive documents. This means that they take up a lot of space, are awkward to handle and, often being fragile, give rise to complex storage problems.

Standard shelving is not a good solution as the shelves are too small. Plans may sometimes be kept in rolls on standard shelving, but this is a makeshift solution which is best avoided.

Three solutions are proposed:

Stowage flat in cabinets designed for horizontal storage: the plans are stacked in drawers that open by sliding forward. These cabinets are rather cumbersome but provide perfect protection for the documents, which do not then require any special treatment; they can be superimposed and their tops may be used as work surfaces.

Another similar solution might be to store the documents in cardboard boxes of suitable size and shape. In any case care must always be taken not to stack too many documents in one pile.

Vertical storage: the documents are mounted on perforated bands which are pinned on to rods. They are stored vertically in cabinets of large capacity which take up little floorspace but are rather difficult of access (there is even a system similar to compact shelving). This solution involves some damage to the documents (gluing and/or stapling of the band which may even mutilate the document if sufficient margins have not been allowed) which is hardly compatible with the requirements of sound archival custody.

Finally, a solution which is the only one possible for very large drawings, namely storage in rolls. These rolls, tubes or boxes with the lid opening over the whole length to facilitate removal are stored in pigeon holes or cupboards of the size required; there are also baskets which can also be used for vertical storage.

It must be remembered that to store the plans simply rolled up without any special protection is not enough, and that in principle a document should never be rolled up on itself without a solid core (wood or plastic).

In any case the handling of plans is an awkward and tiring task demanding considerable space. It is therefore necessary to provide a work surface near the place of storage (minimum size 1.20 m x 1.80 m) for retrieval and replacement. If the documents are made available to the public, large tables must be provided. The best height for these is probably 1.05 m, allowing work to be carried out standing or seated on a stool; drawers set back under the table top may be provided to hold other documents needed.

6.2.2 Plans drawn on a transparent medium

Drawings made on paper cannot easily be reproduced, so that the general practice is to produce the definitive version of a plan on translucent paper. The first transparent material used was vellum coated with vegetable or mineral oil; it soon became brittle and was very difficult to preserve. Modern substitutes come in several weights, the lightest being used for designs and the heaviest for definitive documents. The so-called 'leather negative' does not take pencil well but is good for ink drawing; it tears easily, particularly as it gets older, but on the other hand is not very hygroscopic. The more usual 'parchment' negative takes pencil better but is more hygroscopic. A few years ago there appeared on the market plastic negatives that will take both pencil and ink and are only slightly hygroscopic.

In no circumstances must a negative be folded. The fragility of this medium and its particular hygroscopic characteristics demand that special care be devoted to its preservation, especially with regard to atmospheric conditions (see 6.1.2). Temperature and relative humidity must be carefully regulated and everything done to prevent it from wrinkling. That is why, despite the apparent advantage of guarding against tearing, it is best not to edge tracing papers as this may, among other things, entail recourse to permanent glues and often require the document to be heated.

Proper storage conditions (see 6.2.1) and careful handling are the best protection against tearing. It should be noted that the use of adhesive tape of scotch tape type must be prohibited as it adversely affects the medium whatever this may be.

For negatives that have suffered severe deterioration or are friable, see 6.3 below.

6.2.3 Prints

We have remarked on the large number of prints kept in the files. When the original negatives still exist, the prints can be eliminated unless they reflect a different stage from the original or bear special markings. In such cases they are preserved, and the preservation of documents reproduced by what are often photographic processes constitutes an archival problem, namely that of preserving information contained by documents that are often ephemeral.

Prints are taken by various methods, and more specifically:

Heliography, providing the traditional blueprints by a technique universally adopted and mechanized at the beginning of the century (artificial light). Preservation depends on the variable quality of the papers and on the treatment which they undergo (heat, washing, etc.).

Sepia is another process making use of sensitive paper and is similar to the previous one although longer and rather more tricky. Documents have

been produced by this process, albeit few in number and difficult to preserve.

Diazo processes (dry or wet) are cheaper and widely employed. Here too the chemical processes used will determine the method of long-term preservation of the documents obtained.

In the first half of the twentieth century hectographs were employed to reproduce documents of all kinds, including plans/drawings, which added to the problems of preservation already mentioned that of exposure to ultraviolet radiation.

Since 1948 the Xerox dry electrostatic reproduction process has become very widely used. This process uses untreated paper and the quality of the copies obtained depends essentially on that of the paper employed.

Finally, there is offset printing, whereby drawings are reproduced on paper in an offset press.

The chemical treatment, exposure to light and heat necessitated by some of these reproduction processes thus tend to shorten the life of the prints, whose preservation then requires recourse to substitution (see 6.3.1).

These prints are stored folded in the files to which they belong, an arrangement which shows that the requirements of physical custody are none too compatible with those of the user, who likes to have one file in which he or she can find all the documents. It would, however, be unrealistic to advocate systematic extraction of the prints for separate custody in theoretically better conditions. Apart from the special cases when rescue measures are needed, prints will therefore be left in the files, folded so as to be of the same size as the files, just as when they are attached to other written documents. One of the situations which might require extraction from the file for a better form of custody is that of frequent use.

Whenever a document is removed from its file, care must be taken always to replace it by a dummy and to keep an accurate charge-out record.

6.2.4 Other media

Negatives and prints account for the vast majority of graphic documents preserved in architects' archives. Next to them there may be kept drawings made on drawing paper of various weights (rough drafts and sketches not generally intended to be reproduced).

We should also mention for the sake of completeness other less common media: scraperboard, a sort of cardboard covered with a plaster based coating and generally used for sheets of technical drawings intended for photographic reproduction, or again drafting cloth which is equally sensitive to the atmospheric conditions in which it is stored.

Finally, we should mention the growing encroachment of the computer since the 1950s, extending as it does from the solution of technical engineering problems to the whole range of an architect's activities (CAD) with the added capability of visual display. In this connection a special study should be made on the subject of documents produced or due to be produced with a view to their archival custody, and also of the problems involved in their storage.

6.2.5 Models

These are work and study aids, constructions often requiring skilled and specialized workmanship. Because of their fragility and large size, their custody and upkeep raise difficult problems. Many disappear without trace, their direct usefulness having ceased once the building which they represent has been completed. Furthermore, bearing in mind that a model is usually made to illustrate the intentions of the project designer/superviser to the client or more often to the general public, models tend to be handled and moved about, which naturally contributes to their rapid deterioration.

When in transit or on display they can be effectively protected by a perspex cover which also has the advantage of keeping them free from dust. But once again the essential pre-conditions for satisfactory custody are atmospheric conditions inasmuch as a model is often composed of heterogeneous materials reacting differently to variations in atmospheric conditions.

6.3 Some additional aids to preservation

The remarks which follow are not intended to take the place of specialist studies - nor could they indeed. They simply mention a number of independent specialized techniques: micrographics and photography or restoration, which can sometimes assist in solving archives storage problems.

6.3.1 Micrographics and photography

We have already referred to the problems raised by the use of substitutional microfilm (see 4.5). On the other hand, bearing in mind the fragility or short life of graphic documents, micrographics can be an important aid for preservation and access: once reproduced, the original documents need only be consulted in micrographic form and consequently no longer suffer deterioration due to handling; the use of microforms can likewise save information contained in ephemeral documents such as friable negatives or bad quality prints; in such cases substitution would appear to be the only systematic solution.

The use of microfilm must conform to existing standards (see annex). One copy will be kept on reel as a safety measure and a second copy kept for consultation in the more practical form of aperture cards. The existence on the market of large size reader-printers enables reproductions to be rapidly obtained.

The commonest format is 35 mm but large sizes are sometimes preferred (75 or 105 mm) by reason of the large size of the documents concerned.

Archive services likewise have recourse to conventional photographic methods for particularly valuable documents in order to obtain high quality reproductions which are used for consultation instead of the originals, thus doing away with the need for a reader (e.g. the plans belonging to record group O1 - Royal Household - in the French National Archives).

Care must always be taken to include a centimetric reference on the plate so that the dimensions of the original can be reconstituted.

We shall not consider the new forms of image storing on disk likely to be developed in the next few years, of whose application to archival needs no authoritative study has yet been made.

6.3.2 Restoration

Remedial action following accidents or disasters, like the restoration of documents damaged as a result of unsatisfactory storage or careless handling, is a matter for experts.

The mounting of maps and plans on cloth is a long-established technique well-suited to documents on an opaque medium. For negatives use is now made of polyamides which restore to the document its original elasticity; the negatives are as it were sandwiched between two hot-bonding polyamide fabrics and two reinforcing fabrics - one nylon and the other chiffon.

There are certain golden rules that must be obeyed when restoring archival documents: reversibility, durability of materials, legibility, integrity of the text or drawing. For the rest, every document must be treated as a special case and subjected to expert study.

Nevertheless, even the most sophisticated restoration techniques will be of no avail if the documents are not then properly stored.

RAMP and Related Documents

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24. Cook, Michael. Guidelines for Curriculum Development in Records Management and the Administrations of Modern Archives: A RAMP Study (PGI/82/WS/16). Paris, Unesco, 1982. 74 p.

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English version in preparation.

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Also available in Spanish.

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45. Wimalaratne, K.D.G. Scientific and technological information in transactional files in government records and archives: A RAMP Study. (PGI-84/WS/7). Paris, Unesco, 1984. 70 p.
Also available in French and Spanish.

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48. Orléans, Jacques d'. The Status of archivists in relation to other information professionals in the public service in Africa: A RAMP Study. (PGI-85/WS/2). Paris, Unesco, 1985. 43 p.

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54. Mabbs, A.W. Guide to the archives of international organizations. Part III. (PGI-85/WS/19).40 p.

55. Walne, Peter. Modern archives administration and records management: a RAMP reader (PGI-85/WS/32). 587 p.

Copies of the above studies and reports may be obtained without charge, to the extent that they are still in print, by writing to:

Division of the General Information Programme
Documentation Centre
UNESCO
7, Place de Fontenoy
75700 Paris
France

ANNEXES

N°	Indice[1]	LISTE DES PLANS ARCHITECTE DCE[2]		
101		plan de situation		1/2000
102	A	plan de masse		1/200
103	D	sous-sol		1/50
104	H	rez-de-chausée + coupe 22		1/50
105	J	premier étage		1/50
106	B	2e étage		1/50
107	C	étage courant		1/50
108	D	11e étage		1/50
109	D	12e étage		1/50
110	A	terrasses		1/50
111	C	coupe		1/50
112	A	façade ouest		1/100
113	A	façade est		1/100
114	A	façade sud-ouest		1/100
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116		coupes et détails		1/20
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AGENCEMENT

D 161	A	rez-de-chaussée plan hall et parvis		1/50
D 162	B	rez-de-chaussée plan du plafond		1/50
D 163	B	coupe transversale		1/50
D 164		mezzanine plan du plafond		1/50
D 165		détail agencement appartement		1/20
D 166		coupes salle de conférences		1/50
D 167		détail escalier hall		1/20
D 168		détail passerelles		1/20
D 169		détail local surveillance	1/5	1/20
D 170		détail banque hotesse	1/10	1/20
D 171		détail façade salle de conférence		1/20
D 172		détail vitrines mezzanine		1/20

PLANS COMPLEMENTAIRES PEO[3]

118		quai de livraison : table élévatrice	1/16	1/20
119		local sécurité : tableaux alarme et détection	1/20	
120		panneau de chantier		1/10
121	A	cuisine logement directeur		1/20
122	A	cuisine personnel		1/20
123	A	cuisine gardien		1/20
124		accès handicapés et cour de livraison		1/50

MOBILIER APPEL D'OFFRES[4]

M1		mobilier rez-de-chaussée		1/50
M2		mobilier 1er étage		1/50
M3		détail vitrines mobiles		1/10

1 - L'indice matérialisé par une lettre dont est affecté chaque plan représente les modifications successives subies par le plan ; seul le dernier indice représentant l'état définitf est indiqué ici.

2 - Plans remis aux entreprises lors de la consultation (nº 101-117 et D 161 à 172).

3 - Plans réalisés une fois le chantier ouvert.

4 - Plans réalisés en fin de chantier.

5 - OUVRAGES d'ART

courants ou exceptionnels

- par ouvrage -

5-1 - PAR SECTION DE CONSTRUCTION

5-1-1 - Fiche signalétique simplifiée des ouvrages répertoriés selon la codification SETRA, avec leurs caractéristiques essentielles et leurs localisations par rapport aux P.K. (voir modèle pièce annexe 16)

5-2 - PAR OUVRAGE D'ART, COURANT ou EXCEPTIONNEL

5-2-1 - Fiches signalétiques détaillées (voir modèle pièce annexe n° 17)

5-2-2 - Dossier des plans d'exécution, y compris les dispositions spéciales retenues pour les fondations ainsi que le programme de construction.

5-2-3 - Dossier géotechnique de l'étude, complété ou corrigé par les reconnaissances effectuées en cours de construction.

5-2-4 - Notes de calcul (fondations et superstructures).

5-2-5 - Résultats statistiques du plan de contrôle de la réalisation des fondations, des piles et culées, du tablier et des appuis, équipements annexes, rendant compte en particulier :

. du certificat de conformité,

. du contrôle des bétons (date, ciment, eau de gachage, granulométrie, adjuvants, coulis d'inspection, etc...),

. du contrôle de résistance à la compression,

. du contrôle de mise en tension des câbles,

Autoroute A 42. Sous-section Saint-Maurice de Beynost-Darneux. Remise par l'Etat à la Société des Autoroutes Paris-Rhin-Rhône. Nomenclature du dossier de récolement.

. des injections de gaine, des gammagraphies,

. des incidents de chantier.

NOTA : les résultats des contrôles sur les bétons peuvent éventuellement être rassemblés dans un dossier par centrale à béton ayant approvisionné le chantier.

5-2-6 - Chape d'étanchéïté

- réception du support - état, réfection, procès-verbal,
- résultats des mesures effectuées : adhérence, épaisseur, dureté,
- indication du matériel d'essai utilisé,
- réception de la chape - constatation - réfection, procès-verbal.

5-2-7 - Appuis

- certificat de conformité,
- fiches techniques,
- référence fournisseur,
- notice de relevage du tablier ou de changement des appuis.

5-2-8 - Nivellement des Ouvrages d'Art

Le cahier de nivellement initial comprend :

- la nature et le type des témoins et repères utilisés,
- les schémas de pose des témoins avec indication des points côtés correspondants, des témoins et des repères de nivellement,
- le nivellement des repères,
- le nivellement des références raccordées au nivellement de la polygonale de recolement.

5-2-9 - Procès-verbaux d'essai sous charge statique dynamique - résultats des mesures.

5-2-10 - Appareils spéciaux de mesures installés à demeure - série des mesures effectuées.

5-2-11 - Remblai contigu aux maçonneries :

- provenance,
- mode de mise en oeuvre,
- résultats des mesures effectuées.

5-2-12 - Garanties - Dispositifs de mines

- garanties exceptionnelles accordées par le constructeur ou par le fabricant de pièces particulières,
- dispositifs de mines mis en place.

5-2-13 - Joints de chaussées

- certificat de conformité
- fiches techniques et références du fournisseur,
- souffle mesuré à la pose.

5-2-14 - Recommandantions à l'intention des Services de l'Exploitation de la SAPRR

5-2-15 - Inspection détaillée "Point zéro" des Ouvrages d'Art

5-2-15-1 - Résultats des inspections détaillées (procès-verbaux)

5-2-15-2 - Résultats des inspections détaillées exceptionnelles (rapport spécifique sur un défaut particulier)

5-2-15-3 - Répertoire des anomalies et défauts.

TYPES DE DOSSIERS	DURÉE DE CONSERVATION par les services extérieurs.	PROPOSITIONS de conservation aux archives départementales.		OBSERVATIONS
		Destruction sous réserve tri.	Durée illimitée	
URBANISME. — AMENAGEMENT FONCIER				
1. Plans d'aménagement et d'embellissement.	Durée de validité + 10 ans.		+	
2. Plans de reconstruction et d'aménagement : — règlement et plans ; — dossier d'études ; — dossier d'enquête.	Durée de validité + 10 ans.		+	
3. Plans d'urbanisme et plans directeurs, plans de détail, plans sommaires.	Durée de validité + 10 ans.		+	
4. Schéma directeur d'aménagement et d'urbanisme (S. D. A. U.) : — règlement et plans ; — dossier d'études ; — dossier d'enquête.	Durée de validité + 10 ans.		+	
5. Plans d'occupation des sols (P. O. S.) : — règlement et plans ; — dossier d'études ; — dossier d'enquête.	Durée de validité + 10 ans.		+	
6. Périmètres sensibles.....	Durée de validité + 10 ans.		+	
7. Zones d'aménagement, de rénovation ou de réhabilitation : — décisions de création et décisions modificatives ;	5 ans après la décision de suppression ou le constat d'achèvement de la zone.		+	
— décisions arrêtant le bilan financier prévisionnel de l'opération ;	—	+		
— décisions d'approbation du programme des equipements publics ;	—	+		
— conventions de mandats, concession, conventions d'aménagement ;	—	+		
— cahier des charges de cession des terrains aménagés ;	Sans limitation de durée.			
— décisions de suppression ou de constat d'achèvement de la zone.	5 ans après la décision de suppression ou le constat d'achèvement de la zone.	+		
8. Plans d'aménagement de zones (P.A.Z.).	10 ans après achèvement de la Z. A. C.	+		
9. Zones d'aménagement différé (Z.A.D.) : — dossier d'inscription et plan ; — dossier individuel de droit de préemption ;	5 ans après l'expiration de la validité de la Z. A. D.	+		
10. Dossier de subvention pour la création d'espaces verts et arrêté préfectoral.	10 ans après versement de la subvention.			
11. Certificats d'urbanisme : — certificats d'urbanisme de l'article R. 315-54 du C. U. ;	10 ans à partir de la délivrance ou la dernière correspondance.	+		
— certificats d'urbanisme de l'article L. 111-5 du C. U. ;	Sans limitation de durée.			
— autres certificats d'urbanisme (art. L. 410 du C. U.).	5 ans à partir de la délivrance ou de la dernière correspondance.	+		

17 avril 1980 — 6 — 551 (80/23) ET 80/23 — 4 — 7 — 17 avril 1980 551 (80/23)

Circulaire relative à la conservation et au versement aux Archives départementales des archives des services extérieurs des ministères de l'Environnement et du Cadre de vie et des Transports (France). 17 avril 1980.

TYPES DE DOSSIERS	DURÉE DE CONSERVATION par les services extérieurs.	PROPOSITIONS de conservation aux archives départementales.		OBSERVATIONS
		Destruction sous réserve tri.	Durée illimitée.	
12. Lotissements :				
— dossier d'instruction ;	10 ans après la décision ou la dernière correspondance.	+		
— règlement et plans.	Sans limitation de durée.			
13. Autorisations d'occupation du sol :				
— autorisations de clôtures (R. 441-1 du C. U.) ;	5 ans après la décision ou la dernière correspondance.	+		
— autorisations d'installations et travaux divers (R. 442-1 et suivants du C. U.) ;	5 ans après la décision ou la dernière correspondance.	+		
— autorisation de stationnement de caravanes (R. 443-3 et suivants du C. U.) ;	5 ans après la décision ou la dernière correspondance.	+		
— autorisation de création de terrains aménagés pour le stationnement des caravanes (R. 443-6 et suivants du C. U.).	10 ans après la décision ou la dernière correspondance.	+		
14. Permis de construire :				
— maisons individuelles et constructions collectives de moins de 200 logements (dossier technique, décision d'octroi de primes, permis de construire) ;	— dossier bénéficiant d'une aide de l'Etat : 20 ans (durée du prêt) à compter de la décision ou de la dernière correspondance.	+		
	— dossier ne bénéficiant pas d'une aide de l'Etat : 10 ans après la décision ou la dernière correspondance.	+		
— constructions collectives de plus de 200 logements (dossier technique, décision d'octroi de primes, permis de construire) ;	—	+		
— constructions autres que les logements (hôpitaux, usines, crèches), (dossier technique, permis de construire, autres documents) ;	10 ans après la décision ou la dernière correspondance.	+		
— permis de construire à titre précaire (art. L. 423-1 à 5 du code de l'urbanisme).	Durée de l'autorisation.			
15. Permis de démolir.	10 ans après la décision.	+		
16. Fiscalité : dossier de calculs :				
— taxe locale d'équipement (art. L. 332-6 et suivants du code de l'urbanisme) ;	3 ans à partir du début de la construction.	+		Si ces dossiers sont classés avec le permis de construire, suivre les règles applicables à ces derniers.
— taxe pour dépassement du plafond légal de densité (art. L. 112-2 et L. 332-1 et suivants du code de l'urbanisme) ;	—	+		
— redevance pour constructions de bureaux et d'industries (art. L. 520-1 du code de l'urbanisme).	30 ans.	+		
17. Acquisitions foncières :				
— dossier d'enquête (état parcellaire, certificat hypothécaire, D. U. P., etc.) ;	Durée pendant laquelle l'Etat (Equipement) est propriétaire.		+	
— dossier individuel d'acquisition.	—		+	
18. Acquisitions foncières pour le compte des collectivités locales.	5 ans.			
19. Inventaire des propriétés de l'Etat.	Jusqu'à la nouvelle édition, puis destruction.			

TYPES DE DOSSIERS	DURÉE DE CONSERVATION par les services extérieurs.	PROPOSITIONS de conservation aux archives départementales.		OBSERVATIONS
		Destruction sous réserve tri.	Durée illimitée.	
CONSTRUCTION				
1. Organismes d'H. L. M. : — décrets ou arrêtés de création, de transformation, dissolution d'organismes et textes statutaires.	Durée des organismes.	+		
2. Contrôle permanent de la gestion et du fonctionnement des organismes d'H. L. M.	Mise à jour permanente.			
3. Contrôle de la participation des employeurs à l'effort de construction (1 %).	20 ans.	+		
4. Constructions types expérimentales et agréées : — arrêté d'agrément et plan ; — dossier d'étude.	Durée de l'utilisation + 5 ans.		+	
5. Constructions d'H. L. M. : — dossier technique ; — dossier administratif et financier.	Durée d'effet des décisions de financement.	+		Conserver aux archives départementales des dossiers spécimens.
6. Contrôle de l'application des règles de construction.	10 ans après la notification au constructeur des résultats du contrôle.	+		
7. Agence nationale pour l'amélioration de l'habitat (A. N. A. H.) : — dossier technique et demandes de subventions ; — arrêtés de subventions ; — P. V. — Commission départementale.	5 ans après paiement de la subvention.	+		
8. Prime à l'habitat rural : — dossier d'étude.	Durée d'effet de la décision.	+		
9. Primes pour la construction de logements.	Durée de la validité de la prime.	+		
10. Aide au logement (H. L. M.)	Sans limitation de durée.			
11. Conventionnement en vue de l'aide à la personne : — conventions avec les organismes constructeurs ; — conventions avec les propriétaires bailleurs ; — conventions avec les propriétaires occupants.	Durée de la convention + 2 ans.	+		
12. Financement des logements neufs et anciens : — décisions de financement : — prêts locatifs aidés (P. L. A.) ; — prêts accession à la propriété (P. A. P.) ; — prêts conventionnés (P. C.).	Durée des prêts + 2 ans.	+		
13. Participation de l'Etat au logement des fonctionnaires.	Jusqu'au remboursement des prêts.	+		
14. Changement d'affectation des locaux.	10 ans.	+		

Dossier personnel

78 J 1. Dossier personnel de l'architecte Jules-Clément Lesaffre, constitué en vue de l'obtention de l'agrément ministériel pour la construction de bâtiments communaux. 1948

Société régionale et Association des architectes

2. Société Régionale des Architectes du Nord de la France. Procès-verbaux d'assemblées générales ; correspondance ; divers. 1902-1909

3. Syndicat des Architectes agréés. Société Régionale syndicale des Architectes du Nord de la France. Procès-verbaux d'assemblées générales et séances du Conseil d'administration ; correspondance ; divers. 1930-1939

4. Société Régionale Syndicale des Architectes du Nord de la France. Procès-verbaux d'assemblées générales et de séances du Conseil d'administration ; correspondance ; divers. 1945-1949

5. Société Régionale Syndicale des Architectes du Nord de la France. Architectes décédés : faire-part, articles nécrologiques. 1927-1936

6. - Idem -. Affaire : Architecte Foyer contre les Hospices de Valenciennes. 1934-1935

7. Société des Architectes du département du Nord. Local, 67 rue d'Angleterre à Lille. Bail. 1868

8. Société Régionale des Architectes du Nord de la France. Local, 87 rue Nationale à Lille. Bail (avec plan). 1884

9. - Idem -. Local, 5 rue Basse à Lille. Bail. 1927

10. Congrès du cinquantenaire de l'Association provinciale des Architectes français (architectes de province) (Bourges, 1939). 1939

Projets ; constructions et travaux divers. Plans.

11. Armentières, rue du Pont-de-Beauvais. Maisons (propr. : Verbugghe-Demeulenaere). Plans. Mitoyenneté 1920-1932

12. Capinghem, rue Poincaré. Maison d'habitation (propr. : Cuingnet-Lecourt). Plans. Mitoyenneté. 1926-1932

13. - Idem -. Maison d'habitation (propr. : Vanvynck). Plans. 1932

Archives départementales du Nord. Répertoire numérique de la sous-série 78 J. Fonds de l'architecte Jules-Clément Lesaffre (par Ph. Rosset).

78 J 48. Lambersart, avenue Becquart. Maison d'habitation (propr. : Bouchery). Plans. Mitoyenneté. 1930-1931

49. - Idem -, rue Ampère. Maison de commerce (propr. : Leplat). Plans. 1931

50. - Idem -, avenue de La Roseraie. Clinique chirurgicale de "la Roseraie". Cahier des charges. Métrés de travaux. Plans. 1931-1932

51. - Idem -. Clinique chirurgicale de "La Roseraie". Plans. 1932

52. - Idem -. Clinique chirurgicale de "La Roseraie". Plans. 1932

53. - Idem -. Clinique chirurgicale de "La Roseraie". Chapelle. Plans. 1933

54. - Idem -. Clinique chirurgicale de "La Roseraie". Logement des infirmières. Plans. 1933

55. - Idem -. Clinique chirurgicale de "La Roseraie". Photographies relatives à la construction. Sans date

56. - Idem -, 31 avenue de Boufflers. Atelier (propr. : Lami). Plans. 1931-1932

57. - Idem -, rue du Bois. Maison (propr. : comte de Pas). Plans. 1932

58. - Idem -, rue Vaillant. Maison d'habitation avec garage (propr. : Isbled). Plans. Mitoyenneté. 1932

59. - Idem -, angle des avenues Driant et du Bois. Projet pour la construction de deux maisons de rapport (Union départementale des Sociétés de Secours Mutuels du Nord). Plans. 1932

60. - Idem -, rue Volta. Maison d'habitation (propr. : N. Dumont). Plans. Mitoyenneté. 1932-1933

61. - Idem -, rue Vaillant. Maison avec atelier (propr. : Laurent). Plans. 1933-1934

62. - Idem -, avenue de Boufflers. Immeuble de rapport et groupe de 16 maisons bourgeoises (Union départementale des Sociétés de Secours mutuels du Nord). Cahier des charges. Plans. 1933-1934

63. - Idem -, avenue du Bois. Maison (propr. : Bruyère). Plans. Mitoyenneté. 1934-1936

403 AP

FONDS LAPRADE

CARTONS

COMMANDES OFFICIELLES ET GRANDS TRAVAUX

I - MAROC

403 AP 1-5	Résidence de Rabat : Plans	1919
403 AP 6	Résidence de Rabat : Plans	1919
403 AP 7	Résidence de Rabat : Plans Correspondance avec l'entreprise Riffet, menuiserie d'art	1919-1921
403 AP 8	Projet d'hôtel à Marrakech : Plans	1920-1921
403 AP 9	Projet d'hôtel à Marrakech : Plans et correspondance Compagnie générale de transport et de tourisme au Maroc Casablanca : projet de mosquée, d'hôtel des Postes, de phare, 1916-1919 ; projet de théâtre, 1922. Projet d'hôtel de la tour Hassan à Rabat	1922-1923 1920-1931 et 1935 1921
403 AP 10	Projet de résidence pour M. Ting à Marrakech, 1930. Aménagement des jardins de Dar Dabibagh à Fez, 1931. Correspondance diverse sur le Maroc Affaire de Cadet, architecte au Maroc, de 1919 à 1957 : legs à l'Académie d'Architecture Documentation et correspondance sur le Maroc Documentation sur les casinos et grands hôtels	1923-1926

403 AP 10 bis — Articles de M. Laprade sur Lyautey et le Maroc : correspondance et textes.

403 AP 11 — Photographies diverses de constructions au Maroc

..... — .....

IV - Barrage de Génissiat

403 AP 43 — Barrage de Génissiat et bâtiments annexes (parc de Génissiat, cité de la Bornière, poste EDF de Vielmoulin) entrepris pour la Compagnie générale du Rhône. 1937-1957
Concours, devis, plans, pièces diverses. 1938-1948

403 AP 44 — Concours et travaux définitifs. 1938-1945

403 AP 45 — Correspondance, plans, devis, travaux divers... 1937-1957

403 AP 46 — Correspondance avec les entrepreneurs, plans...
Parc et cité de Génissiat : maisons du personnel, 1948.

403 AP 47 — Plans, devis, correspondance. 1948-1952

403 AP 48 — Cité de la Bornière près de Génissiat 1940-1947
Aménagement des maisons du personnel 1948-1952

403 AP 49 — Poste EDF de Vielmoulin à Génissiat
Maisons des ingénieurs et du personnel : plans, devis, correspondance. 1936-1956

403 AP 50 — Poste EDF de Vielmoulin : plans, devis, correspondance. 1948-1950

403 AP 51 — Poste EDF de Vielmoulin : poste de commande, bâtiments annexes, logement du personnel : plans. 1948

403 AP 52 Photographies et documentation sur les barrages.
Inauguration de Donzère-Mondragon, 25 octobre 1952.
Coupures de presse, revues spécialisées.

J2 (15)
267 documents

ARMEE DU SALUT - LA CITE DU REFUGE

I - LA CITE DU REFUGE

1 ... 47 Correspondance générale entre :
. L'atelier et l'armée du Salut
. L'atelier et les différents entrepreneurs

48 ... 76 Notes diverses

II - GRANDS TRAVAUX

77 ... 79 Description et contenance des bâtiments
80 ... 107 Chauffage et ventilation
108 ... 136 Installation sanitaire
137 ... 138 Charpente
139 ... 181 Carrelage et revêtement des sols
182 ... 202 Devis descriptif des travaux de : démolition - terrassements - maçonnerie et ciments - béton armé - canalisations - étanchéité

III - AMENAGEMENT DES CUISINES ET DES DIFFERENTS BATIMENTS

203 ... 232 Cuisines : installation et équipements
233 ... 238 Ameublement - aménagements intérieurs et extérieurs

IV - 239 ... 245 INSTALLATION DE CHAUFFAGES CENTRAUX

Devis établis par l'entreprise Castiaux :
5 plans : A 2124 Pilotis - sous-sol (2 plans)
A 2124 Solarium - 6 et 7ème étages
A 2124 2, 3, 4, 5ème étages
A 2124 1er étage, rez-de-chaussée

V - CHAUFFAGE ET SERVICE D'EAU CHAUDE

Projets de chauffage proposés par les établissements Leroy
Plans Le Corbusier annotés par les entreprises Leroy :

246 ... 259
2606 CR Plan du sous-sol 2ème projet Plan N° 11.071 A
2607 CR Plan des pilotis 2ème projet Plan N° 11.071 B
2608 CR Plan du rez-de-chaussée 2ème projet Plan N° 11.071 C
2609 CR Plan du 1er étage 2ème projet Plan N° 11.071 D

* Fondation Le Corbusier (Paris) Inventaire d'un dossier "pièces écrites".

Bordereau de description des documents cartographiques et architecturaux AN 1985

1 **Institution où le document est conservé :** _____
Lieu de conservation : _____

2 **Cote** _____ Eventuellement titre du fonds : _____
Le document est isolé _ , assemblé dans un atlas _ , un cahier _ , un carnet _
Feuille d'assemblage d'une carte n° __ Titre de l'ensemble : _____
Pour un volume ou un ensemble, nombre de folios ____ Plan conservé roulé _

3 **Ancienne cote :** _____
Anciennes collections : _____

4 **Communication** libre _ avec autorisation _ Non communicable _

5 **Titre** _____

6 **Date du document :** Année ____ Mois ___ Jour ___

7 Pour un document cartographique, **nom de l'aire géographique représentée :**
_____
Pour un plan ou dessin d'architecture, **nom de l'ouvrage représenté :**
_____

8 **Localisation.** Pays : _____
Région : _____ Département : _____
Canton : _____ Commune : _____
Quartier ou lieu-dit : _____
Rue : _____ Numéro : ____
N° de parcelle du cadastre : ____ Coordonnées géographiques : _____

9 Pour un document cartographique, **type de carte ou de plan :**
a) _____ b) _____ c) _____
Pour un plan ou dessin d'architecture, **type d'ouvrage construit :**
a) _____ b) _____ c) _____

10 **Système de représentation.**

Pour un document cartographique :
Vue géométrale Vue perspective _
Système de projection : _____

Pour un plan ou dessin d'architecture :
Croquis _ Esquisse _
Projet _ Projet d'exécution _
Relevé après exécution _
Restitution _

Vue perspective _ axonométrique _
Plan masse _ Plan au sol _
Plan de niveau, lequel ? __
Plan de jardin _
Elévation _
Coupe _
Détail de structure _
Détail de décor _

Autres documents :
Schéma _ Diagramme _
Tableau _

Documents en trois dimensions :
Maquette _ Plan-relief

Emplacement destiné à recevoir une image-contact photographique

11 **Numéro du cliché :**

70

70

(12) **Echelle :** _____ (13) **Unités de mesures** utilisées : _____ (14) **Langues utilisées :** _____

(15) **Dimensions :** (en centimètres) **Hauteur** ____, __ **Largeur** ____, __ (16) Retombes. Combien ? ____

(17) **Etat du document.** Bon __ Médiocre __ Mauvais __ Restauré en _____
Observations _____

(18) Support		(19) Technique *(pour un document manuscrit)*		(20) Technique *(pour un document reproduit)*	
Papier	__	Crayon noir	__	Gravé sur bois	__
Papier entoilé	__	Crayon couleur	__	Gravé sur cuivre	__
Papier collé sur carton	__	Fusain	__	Lithographié	__
Parchemin	__	Plume encre noire	__	Imprimé	__
Vélin	__	Plume encre de Chine	__	Rehauts de couleur	__
Tissu	__	Plume encre couleur.	__	Tirage d'architecte	__
Calque traditionnel	__	Lavis encre noire	__	Photographie	__
Calque synthétique	__	Lavis encre de Chine	__	Phot. aérienne	__
Support photographique	__	Lavis couleur	__	Photocopie	__
_____	__	Aquarellé	__	Fac-similé	__
_____	__	_____	__	Computer assisted	__
_____	__	_____	__	_____	__

(21) **Date de l'état représenté** (si différente de la date du doc.) _____

(22) **Lieu d'exécution** _____

(23) **Auteur** _____

(24) **Destinataire, commanditaire** _____

(25) **Dessinateur** (si différent de l'auteur) _____

(26) **Graveur** _____

(27) **Editeur** _____

(28) **Description complémentaire** _____

(29) **Documents annexes** _____

(30) **Bibliographie. Observations historiques.** _____

L'ouvrage représenté subsiste-t-il ? __ Modifié __ , détruit __ , en ____

(31) **Le bordereau a été rempli en 1 9** __ par _____

Indications pour la saisie informatique : _____

Imprimerie BREG 48.78.07.07

BORDEREAU DE DESCRIPTION DES DOCUMENTS CARTOGRAPHIQUES
ET ARCHITECTURAUX - A.N. 85

NOTICE D'UTILISATION

Le bordereau doit permettre tout à la fois :

1) La réalisation d'un inventaire de type traditionnel, les feuilles étant placées dans des reliures mobiles.

2) L'enrichissement de cet inventaire par des mentions d'ordre administratif (communicabilité), technique (restauration) ou historique (identification, bibliographie).

3) L'alimentation d'une banque de données par entrée de ses divers champs documentaires.

Il s'applique aux documents figurés architecturaux comme aux cartes et plans et, par extension, aux documents de natures diverses qui sont souvent conservés avec les collections de plans (tableaux généalogiques, tableaux d'effectifs militaires, et aussi maquettes, plans-reliefs...). Ce bordereau est donc plus spécialement destiné aux archivistes, et doit leur permettre de dresser un inventaire normalisé de leurs fonds.

Les questions appelant des réponses rédactionnelles sont réduites au minimum pour abréger le temps du personnel et assurer l'uniformisation. Pour une bonne part des questions, il suffira de tracer une croix (ou un chiffre, dans le cas d'une fiche unique pour plusieurs documents homogènes) dans les emplacements choisis : dans les cas extrêmes, une ligne est ajoutée pour l'adjonction d'un terme nouveau.

Il est recommandé d'écrire en LETTRES CAPITALES ou, mieux, de DACTYLOGRAPHIER les réponses.

Bien entendu, pour un même document, toutes les questions n'appellent pas une réponse (par ex. : les coordonnées géographiques ne sont à indiquer que si les autres procédés de localisation font défaut ou ne s'appliquent pas).

Dans l'ordre des champs :

1) Inscrire le nom de l'**institution** : Archives nationales, départementales, Bibliothèque, Institut, Fondation, Musée, etc. L'adresse peut être nécessaire. Il est commode d'utiliser un timbre humide. La rubrique **lieu de conservation** est à remplir lorsque le document n'est pas conservé dans le dépôt principal de l'institution.

2) **Cote** à porter in extenso, y compris le n° de la pièce, du folio, de la page. Si le document appartient à un fonds homogène intéressant l'architecture ou l'urbanisme, il est indispensable d'ajouter le nom de ce fonds. Par **titre d'ensemble**, on entendra celui de la série à laquelle le document pouvait appartenir à l'origine (Recueils d'architectures, etc.).

3) **Ancienne cote** : mention utile pour les pièces retirées anciennement de leur fonds d'origine. **Anciennes collections** désigne les collections publiques ou privées auxquelles le document a appartenu. Mentionner ici les achats, dons ou dépôts.

4. **Communication.** Elle peut être liée au statut du document (cas d'un dépôt), à sa fragilité, à son caractère précieux.

5. **Le titre** doit être transcrit scrupuleusement avec l'orthographe ancienne. Des points entre crochets signalent les éventuelles coupures.

6. **La date** est celle qui apparaît sur le document, ou qui est restituée (à placer entre crochets dans ce cas). Utiliser le calendrier grégorien, et transposer le calendrier révolutionnaire français. Commencer par l'année, puis le mois, en chiffres, puis le jour. Pour les datations approximatives, écrire 1600-1625, et non : Premier quart du XVII[e] siècle. Pour environ, écrire ca (circa).

7. Pour désigner l'**aire géographique**, utiliser dans la mesure du possible un terme générique avant le toponyme : Duché de Bourgogne, Massif du Mont-Blanc, Département de Haute-Saône, Bassin de la Seine, Environs de Paris, Ville de Lyon. Le signe > placé avant signifiera que l'aire représentée dépasse en réalité la désignation choisie, et le signe < qu'elle n'en est qu'une partie.
Pour désigner l'**ouvrage construit**, mêmes observations : Palais du Louvre, Maison Belhomme, Viaduc de Garabit, Autoroute A 6.

8) **Localisation.** Suivant l'étendue de l'aire représentée, on remplira le questionnaire à partir de la première ligne. Pour le cadastre, donner sa date. Pour les coordonnées géographiques (nécessaires pour les cartes marines ou les lieux situés loin des agglomérations), les énumérer dans l'ordre O. E. S. N. Préciser si elles déterminent le centre de la carte, ou les méridiens et parallèles qui l'encadrent. Le méridien de référence est le méridien international (Greenwich). Toute restitution est à placer entre crochets.

9) **Type de carte.** On choisira pour **a** un descripteur principal, pour **b** et **c** des descripteurs secondaires, à prendre de préférence dans le lexique ci-dessous (au besoin, en se contentant de noter leur n° de référence) :

1) Administration (toutes circonscriptions)
2) Aériennes (lignes)
3) Aménagement du territoire
4) Anthropologie
5) Archéologie
6) Architecture
7) Arpentage (plan d')
8) Biologie
9) Cadastre
10) Chasses
11) Chemins de fer
12) Climatologie
13) Commerce
14) Culture
15) Démographie
16) Economie
17) Elections
18) Elevage
19) Energie (sources d')
20) Ethnographie
21) Exploration
22) Faune
23) Forêts
24) Géologie
25) Géomorphologie
26) Histoire
27) Hydrographie
28) Industrie
29) Itinéraire
30) Linguistique
31) Marine
32) Météorologie
33) Militaire
34) Minéralogie
35) Mines
36) Montagnes
37) Politique (plusieurs pays)
38) Postes
39) Relief
40) Routes
41) Terrier (plan)
42) Tourisme
43) Transports
44) Urbanisme
45) Végétation
46) Ville

Type d'ouvrage. Utiliser le même processus, sans qu'il soit nécessaire de recourir à un lexique, mais en veillant à l'uniformité des termes employés. En **a** l'ouvrage principal (maison, autoroute, usine, château), en **b** et **c**, éventuellement, les ouvrages secondaires représentés.

10) **Système de représentation.** La vue géométrale est une simple projection à l'horizontale (ou à la verticale), la vue perspective développe l'illusion du relief, selon divers procédés que l'on pourra désigner ici en clair.
Pour les **ouvrages**, le rez-de-chaussée apparaît sur le plan au sol. Pour les niveaux, on indiquera les 1er et 2e sous-sols par les mentions − 1, − 2, et les étages par + 1, + 2. Pour les élévations et coupes, on peut préciser leur orientation : E/O, S/N. Dans le cas de plusieurs documents décrits sur un même bordereau, on remplacera les croix par des chiffres : 3 plans de niveaux, 2 élévations, 1 coupe, 6 détails...

Autres documents. La mention **tableau** peut viser toute représentation graphique sans lien avec l'architecture (tableau généalogique...).

11) N° de **cliché.** Indiquer le format ; éventuellement les conditions de reproduction.

12) **Echelle.** A donner telle qu'elle est inscrite, ou à restituer (entre crochets) sous la forme habituelle : 1/50000.

13) **Unités de mesures utilisées.** Les donner avec leur orthographe (qui peut servir à dater le document) : toise ou thoize, piedz...

14) **Langues utilisées.** Langue du titre, de la carte, de la légende (si elles sont différentes).

15) **Dimensions.** A mesurer bord à bord.

16) **Les retombes** sont des feuilles annexes collées sur le plan pour faire connaître la disposition d'un niveau différent, ou une option différente pour un même niveau (ou une même façade).

17 à 20) Sans observations. Dans la description technique, plusieurs mentions peuvent être nécessaires pour un même document (crayon noir et lavis de couleur).

21) **Date de l'état représenté.** Mention utile pour toute carte rétrospective.

23) **L'auteur** est, suivant les cas, le dessinateur, l'architecte, l'urbaniste...

24) Le **destinataire** ou **commanditaire** est la personne physique ou morale qui reçoit la dédicace de la carte, ou qui commande les travaux.

23 à 27) Donner le titre de l'auteur, du dessinateur et du graveur, l'adresse de l'éditeur.

28) **Description complémentaire.** Tous éléments caractéristiques : cartouche, allégories, personnages, décors, armoiries, rose des vents, texte explicatif.

29 à 31) Sans observations.

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1292. « Comté et gouvernement général de Provence divisé en ses sénéchaussées et vigueries avec les terres adjacentes sçavoir la principauté d'Orange, le Comtat Venaisin etc... ». F. de Witt. A Amsterdam, chez Pierre Mortier. [Début XVIII[e] s.]

Éch. 1/485.000. 61 mm pour 4 lieues communes d'Allemagne. Relief, cours d'eau, routes, canaux, vigueries, villes, villages. Cartouche. Dim. 0,60 × 0,49.

NN 203/46.

1293. « Carte de la Provence divisée par ses vigueries et baillages, dédié et présenté à Messire Bertrand René Pallu... intendant... de la ville et généralité de Lyon ». Bailleul le jeune. A Lyon, chez Daudet, rue Mercière. [Entre 1738 et 1750.]

Éch. 1/508.000. 46 mm pour 4 lieues de Provence. Relief, cours d'eau, routes, bois, vigueries villes, villages, abbayes. Cartouche. Coul. Dim. 0,68 × 0,475.

NN 203/6.

1294. « Carte particulière des environs de Nice et de Villefranche; depuis Villeneuve en Provence jusqu'à Monaco où l'on voit la marche des armées de France et d'Espagne, leurs (*sic*) passage du Var et les différentes attaques des retranchements de Mont-Alban et de Villefranche le 19 avril 1744 ». A Paris, chez Guérard, rue Saint-Jacques, près St Yves, au Chariot d'Or [1744].

Éch. 1/42.000. 104 mm pour 1 lieue commune. Relief, côte, cours d'eau, villages, châteaux, itinéraire des armées. Lég. Dim. 0,635 × 0,45.

NN 386/84.

1295. « Provincia gallis la Provence dicta determinata in omnes suas praefecturas cum terris confinibus et alluentibus maris Mediterranei partibus ». Matthieu Seutter. Augsbourg [Première moitié du XVIII[e] s.]

Éch. 1/415.000. 89 mm pour 5 lieues communes d'Allemagne. Cours d'eau, côte, îles, canaux, routes, relief, limites des vigueries, villes, villages. Cartouche de Gottfr. Rogg. Coul. Dim. 0,574 × 0,497.

NN 203/4.

1296. « Carte de la Provence, du Comtat Venaissin et de la principauté d'Orange... ». C. F. Delamarche, géographe. A Paris chez l'auteur, rue du Foin Saint-Jacques, au Collège de Maître Gervais, 1783.

Éch. 1/400.000. 133 mm pour 12 lieues communes. Relief, côte, cours d'eau, étangs, forêts, routes, vigueries, villes, villages. Cartouche. Coul. Dim. 0,655 × 0,58.

NN 301/8.

1297. « Carte générale du pays et comté de Provence, levée géométriquement par ordre du Roi, presentée aux États, présidents en iceux M[gr] Jean de Dieu Raymond de Boisgelin, archevêque d'Aix... ». Capitaine, 1788.

Éch. 1/364.000. 107 mm pour 20.000 toises. Bois, vignes, cours d'eau, étangs, canaux, routes, villes, villages, abbayes, châteaux, limites des vigueries. Cartouche. Lég. Dim. 0,815 × 0,56.

NN 203/38.

Archives nationales. Catalogue général des cartes, plans et dessins d'architecture. Série NN, par Cl.-F. Rochat et M. Le Moël, Paris, 1978.

Kol. Federz., im Maßstab 2:3 verjüngte Kopie des Originalgrundrisses / Bremhof und Hangenmühle im Grundriß / Grenzsteine; Lohbäume bildhaft / Flurnamen / Erklärung

Enthält: Waldungen wie K Nr. 117

Prov.: [Forstamt Breuberg]

123 Geometrischer Grundriß von dem herrschaftlichen Wald in der Herrschaft Breuberg der Seckmaurer Forst genannt (Inselkarte)

1797 / J. Seifried, Oberamtsgeometré zu Umstadt / 200 Ruten = 20,3 cm [1:4200] / 64 × 99 cm / Windr.

Kol. Federz., im Maßstab 2:3 verjüngte Kopie des Originalgrundrisses / Hof Hengmantel (Henckmantel) im Grundriß / Lohbaum, Zollstock und Jagdstöcke, davon einer mit Warnungspfahl, bildhaft, Grenzsteine / Flurnamen / Erklärung

Enthält folgende Waldungen: Holdergraben, Haingrunder Kirchpfad, Im Helgertsgraben (Hölgetsgraben), Rote Heide (Auf der rothen Hayden)

Prov.: [Forstamt Breuberg]

124 Geometrischer Grundriß von dem herrschaftlichen Wald in der Herrschaft Breuberg der Vielbrunner (Villbronner) Forst genannt (Teil 1, Inselkarte)

1797 / J. Seifried, Oberamtsgeometré zu Umstadt / 200 Ruten = 20,2 cm [1:4200] / 65,5 × 100 cm / Or.: O

Kol. Federz., im Maßstab 2:3 verjüngte Kopie des Originalgrundrisses / Hainhaus im Grundriß / Zollstock bildhaft, Grenzsteine / Flurnamen / Erklärung

Enthält folgende Waldungen: Dicke Hecken, Haingrunder Kirchpfad, Eichelsgraben, Obere Strieht, Strieht, In den Erlen, Kohlacker, Heidenbuckel, Untere Haspel, Tälchen (Das Daehligen), Im Gebrannten

Prov.: [Forstamt Breuberg]

125 Geometrischer Grundriß über den herrschaftlichen Wald zum Vielbrunner (Villbrunner) Forst gehörig (Teil 2, Inselkarte)

1797 / J. Seifried, Oberamtsgeometré zu Umstadt / 200 Ruten = 20,3 cm [1:4200] / 64 × 114 cm / Or.: O

Kol. Federz., im Maßstab 2:3 verjüngte Kopie des Originalgrundrisses / Hainhaus im Grundriß / Grenzsteine / Flurnamen / Erklärung

Enthält folgende Waldungen: Eschern, Großer Schlag, Bei des Centgrafen Furt (Fürth), Neuer Wald, Vorderer Berg, Kohlert, Eselspfad, Kohlwald, Obere Haspel

Prov.: [Forstamt Breuberg]

126 Geometrischer Grundriß über den herrschaftlich breubergischen Wald der Brunntaler (Bronthaler) Forst genannt (Inselkarte)

1797 / J. Seifried, Oberamtsgeometré zu Umstadt / 300 Dezimalruten zu 14 Nürnberger Schuh = 19,8 cm [1:6300], ½ Dezimalschuh zu 5 Zoll = 21,2 cm / 61 × 94 cm / Windr.

Inventar des löwenstein-wertheim-rosenbergschen Karten und Planselekts im Staatsarchiv Wertheim. 1725-1835.
Bearbeitet von Norbert Hofmann. Stuttgart, 1983.

LES NORMES

Environ 3500 organismes publics ou privés élaborent, éditent, diffusent des normes, règlements, documents techniques sous de multiples appellations. Les normes les plus utilisées sont les normes ISO (internationales), DIN (allemandes), BS (britanniques), AFNOR (françaises), API (américaines), ASME, ASMT, ANSI, ASTM, NEMA... Pour s'y retrouver, on dispose :

Visual Search Microfilm File : banque de données sur microfilm et microfiche reproduisant les textes intégraux des principales normes utilisées dans le monde. Index papier.

NORIANE : base de données informatisée de l'AFNOR ; normes ISO, AFNOR et CEI, règlements techniques français et européens, spécifications professionnelles françaises.

Kwic Index (édition 1983) : permet d'identifier toutes les normes internationales existant sur un sujet donné (en anglais).

Catalogue des normes internationales ISO (édition 1985) : liste des normes publiées et index.

Catalogues de normes nationales (exemple AFNOR, édition annuelle).

Normes applicables à la construction : cf. ci-dessus 2.3.3.

A signaler spécialement pour notre objet, les normes applicables aux documents figurés :

- Normes internationales ISO recensées dans le Recueil ISO 12. Dessins techniques (édition 1982) : généralités et principes de présentation.- cotation, tolérancement et états de surface.- règles spécifiques régissant le dessin de bâtiment, d'architecture et de génie civil.- symboles graphiques.
- Normes nationales : exemple français

P - Bâtiment et génie civil

P 02 - Signes conventionnels, dessins d'architecture

P 02-001 (1979) Dessins d'architecture, de bâtiment et de génie civil : terminologie

P 02-002 (1979) Idem : présentation des dessins de bâtiment.
P 02-003 (1979) Idem : traits.
P 02-005 (1946) Dessins d'architecture : cotes.
P 02-006 (1946) Idem : formats et pliages.
P 02-013 (1946) Idem : représentation des conduits dans les murs.
E - Mécanique.
E 04 - Dessins techniques.
NF E 04-501 (1978 Dessins techniques. Principes généraux. Classification. Termes et définitions.
NF E 04-502 (1978) Idem. Formats et présentation des éléments graphiques des documents.
NF E 04-503 (1978) Idem. Cartouches d'inscription.
NF E 04-504 (1978) Idem. Nomenclature de définition.
NF E 04-505 (1978) Idem. Ecriture.
NF E 04-506 (1978) Idem. Echelle.
NF E 04-507 (1978) Idem. Pliage de triages et dessins.
NF E 04-520 (1984) Idem. Principes de représentation.

Normes applicables au catalogage des documents figurés (exemples) :
- En France :
NF Z 44-067 (1981) Catalogage des documents cartographiques. Rédaction de la notice bibliographique.
NF Z 44-068 (1982) Catalogue de documents cartographiques. Présentation de la notice catalographique.
- En Grande-Bretagne :
BS 5191 (1974) Recommandations for bibliographical references to maps and charts. I - Refenres in accessions lists.

Normes applicables à la micrographie. On signalera ici les principales normes :
- Normes internationales ISO :
ISO 4331 (1977) Film photographique pour la conservation d'archives. Type gélatino-argentique.
ISO 4332 (1977) Idem.
ISO 3272/1 (1983) Micrographie des dessins techniques et autres documents de bureaux d'études. Modes opératoires.

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LISTE DES SIGLES UTILISES

AFNOR	Association française de normalisation
AMT	Assistance-Marché de travaux
APD	Avant-projet détaillé
APS	Avant-projet sommaire
CAEM	Conseil d'assistance économique mutuel (pays de l'Est)
CGT	Contrôle général des travaux
CROIA	Commission régionale des opérations immobilières et architecturales (France)
CSTB	Centre scientifique et technique du bâtiment (Paris-France)
DOE	Dossier des ouvrages exécutés
ISO	Organisation internationale de normalisation
OCDE	Organisation de coopération et de développement économique (pays de l'Ouest)
PTT	Postes, télégraphe, téléphone (France)
REEF	Recueil des éléments utiles à l'établissement et à l'exécution des projets et marchés de bâtiments en France
SEMARBO	Société d'économie mixte d'aménagement et de rénovation de la ville de Bobigny (France, Seine-Saint-Denis)
UIA	Union internationale des architectes